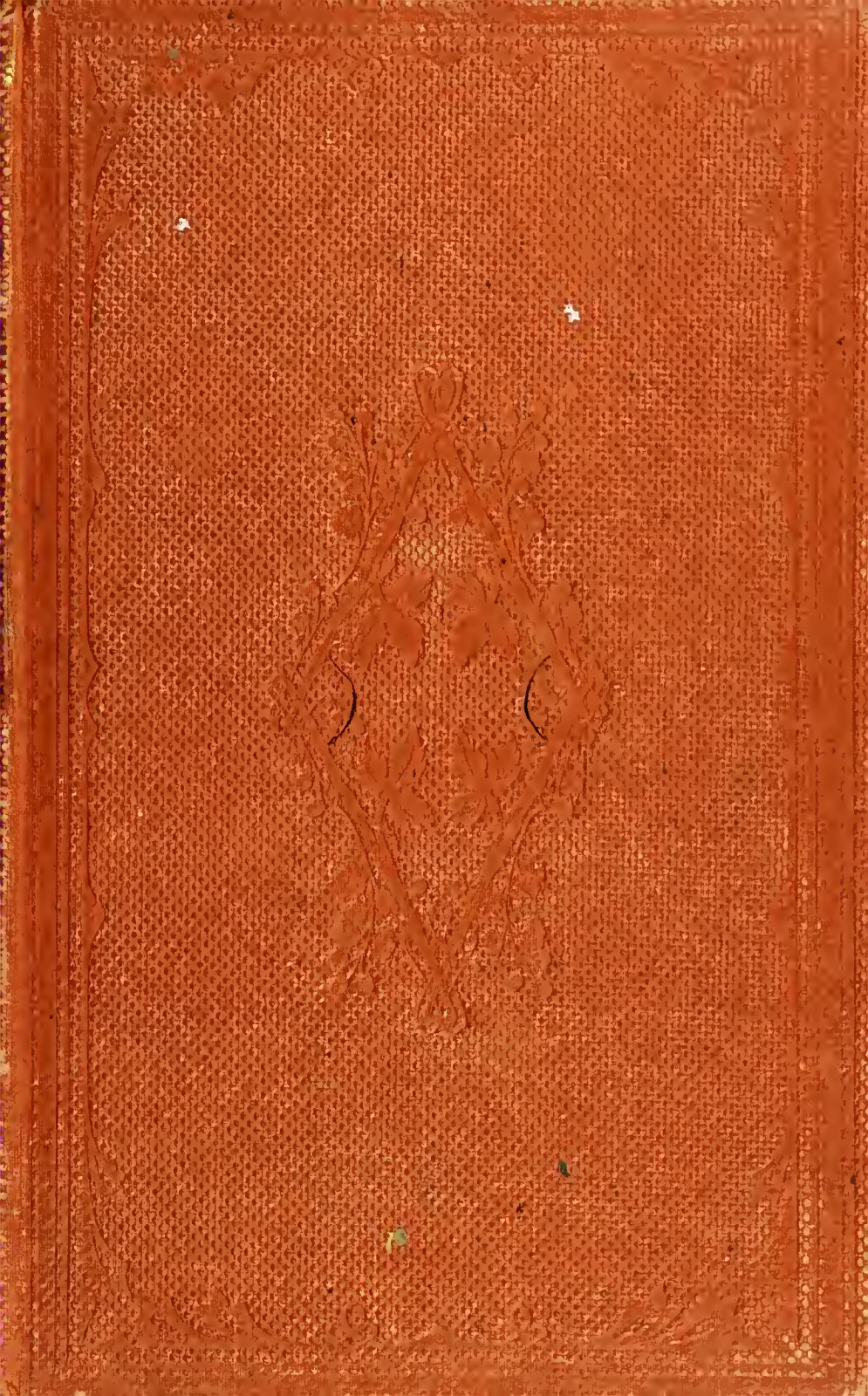




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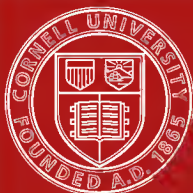
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ON THE
PROBABLE FALL
IN THE
VALUE OF GOLD,
ETC., ETC.

ON THE

PROBABLE FALL

IN THE

VALUE OF GOLD:

THE COMMERCIAL AND SOCIAL CONSEQUENCES WHICH MAY
ENSUE,
AND THE MEASURES WHICH IT INVITES.

BY
MICHEL CHEVALIER,
MEMBER OF THE INSTITUTE OF FRANCE, ETC., ETC.

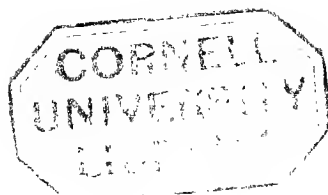
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BY
RICHARD COBDEN, Esq.

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TRANSLATOR'S PREFACE.

THE substance of the work, of which the following pages are a translation, appeared originally in the *Revue des deux Mondes*, in the autumn of 1857, and was afterwards reprinted in a pamphlet form. The author has since rewritten and enlarged it to double the original size. The present translation will appear simultaneously with the French edition.

The question of the probable fall in the value of gold, and the consequent rise in that of all other commodities, wherever gold is the standard of value, has not hitherto attracted so much attention in this country as it has in France, or as its great importance would seem to demand. In introducing the Bank Act of 1844, Sir Robert Peel said:—"There is no contract, public or private, no engagement, national or individual, which is unaffected by it. The enterprises of commerce, the profits

of trade, the arrangements made in all the domestic relations of society, the wages of labour, pecuniary transactions of the highest amount and the lowest, the payment of the national debt, the provision for the national expenditure, the command which the coin of the smallest denomination has over the necessities of life, are all affected by the decision to which we may come on that great question which I am about to submit to the consideration of the committee." The main object which the author of the present Bank Act had in view, was to prevent those fluctuations in the amount of the currency which were alleged to have arisen from the arbitrary action of the Bank of England, and which rarely exceeded two or three millions in the course of a long series of years. With much greater force, then, must his expressions apply to the present state of things, when an *annual* increase in the production of gold of nearly thirty millions has suddenly taken place, more than the half of which finds its way to our shores.

It is estimated by M. Chevalier that the present yield of gold amounts, in ten years, to about as much as the entire production during the 356 years which intervened between the date of the discovery of America by Columbus, and the year 1848, when the mines of California were discovered. It is probable that the present production of gold amounts to five times that of the year 1847. Had such an increase occurred in the supply of any article, such as corn, sugar, or cotton, of which the whole

annual produce is consumed within a couple of years, it would have probably caused a depreciation to the extent of nine-tenths of its value. But owing to the large stock of gold in existence, amounting to probably more than twenty or thirty times even its present yearly production, it takes some time to affect its volume to any appreciable extent. Unless, however, the cardinal rule of commerce, that quantity governs price, which applies infallibly to all other commodities, loses its force when gold is concerned, this sudden and great increase must be followed by a reduction of value.

That so little effect should have hitherto been produced upon the value of this precious metal, especially as measured by its relation to silver, is accounted for by a reference to what is now passing in France, where the gradual substitution of a gold for a silver currency has, during the last eight years, absorbed the greater portion of the gold imported into Europe from the new mines. On this subject, M. Chevalier has given us some very striking statistical facts.* France has in this way, to use his expression, been the "*parachute*" which has retarded the fall in gold. It will be seen that his main object has been to induce the French government to put an end to this, by adopting in practice, what he main-

* At page 45 will be found a statement of the gold coined at the Paris mints. It is brought down to the end of 1857. I have since ascertained that the amount coined in the year 1858 exceeded 480,000,000 *francs* (£19,600,000).

tains has always been the theory of the French law, a silver standard. Should his arguments be successful (and it is difficult to see how the French government can resist his facts and reasonings—certainly it can never answer them), or should the process of absorption cease, from the exhaustion of the stock of silver held in France, then we may anticipate a more rapid fall in the value of gold.

It will be seen that M. Chevalier does not recommend the adoption of any legislative measures to meet the change in this country. He considers that gold having been avowedly the legal tender and the sole standard of value in England, and all existing contracts having been entered into with that knowledge, the parties to them must, so far as the legislature is concerned, abide the consequences of any *natural* disturbance of the value of this metal.

But although government may have no right to interfere with the past, it ought not to be so summarily excluded from all interference with the future, at least to an extent necessary to facilitate voluntary contracts involving payments otherwise than in gold. An able writer on the currency* has recommended the establishment of life assurance companies on the basis of a silver standard. Should a great and rapid depreciation of gold

* Mr. James Maclaren.

take place, some such precaution as this, in all contracts extending over a long period of time, may be necessary. It would then be a convenience to have the relative values of gold and silver periodically published under the authority of a law, by the Bank of England for instance, computed from the exchanges of the day with those countries, such as Holland and Belgium, where a silver standard exists.

Another mode of evading the consequences of a depreciation of the currency might be found in a resort to something like the primitive practice of paying in kind. Where long engagements, such as farm leases, are entered into, the parties might stipulate for a rent to be regulated by the prices of produce, upon the principle of the tithe commutation rent charge. In this, as in all other bargains and investments, it will only remain for individuals to take such precautions as are in their power to guard themselves from the consequences of the impending change. Should the views of M. Chevalier be realised, there will be much anxious deliberation as to the best mode of escaping from the effects of a universal derangement in the value of labour and property. Wages and salaries of all kinds would eventually rise in proportion to the enhanced price of commodities, but the transition would, I fear, be accompanied with much inconvenience and suffering. The rise would not be steady and continuous, but would be effected by leaps, and after struggles which would tend to derange and convulse the relations of

capital and labour. With respect to those who have property to invest, they would, as a rule, avoid those investments which yield incomes of a fixed amount of money, such as dividends from the funds, interest from bonds and mortgages, as well as annuities, rent charges, ground rents, guaranteed stock, &c.; whilst property of an expansive nature, which rises in proportion to the depreciation of the currency, such as land, houses, shares, &c., would be preferred.

The merchant and trader who balance their transactions in two, or three, or at the utmost six months, would be but slightly affected, in so far as the value of their capital is concerned, by the depreciation of the standard; but they would experience the evil in another form. The tendency to a general rise of prices would lead to an expansion of credit, and an increase of speculation, which would be followed by panics and convulsions of greater violence and more frequent recurrence than have been hitherto experienced. Instead of a crisis visiting the commercial world once in each decade, its return might be expected every five years. The manufacturer would probably find it more difficult to procure the raw material of his industry at remunerating prices, for speculation will always be directed towards raw products in preference to manufactured articles. This was the case previous to the late panic; and even at the present moment, whilst we are still in the eddy of a crisis, the prices of the raw materials of our staple

manufactures maintain a high value, *as compared with any corresponding previous period*. The very nature of the trade created by the new gold mines is calculated to increase this evil: for it cannot be denied that it is a sterile commerce which yields neither raw material nor capital. I speak of that portion of the new gold, probably more than seven-eighths of the whole, which passes through the Mint and enters into the currency; the effect of which, is, instead of increasing the supply of food, raw material, or capital, simply to render more bulky and abundant an instrument of exchange, the chief merit of which before consisted in its scarcity and portability.

It may be well to caution the reader against falling into any misapprehension as to the author's views respecting the amount of depreciation to be expected. Although throughout his argument he assumes that gold will fall to the half of its present value, yet he more than once explains that he does so only for clearness of illustration, and not because he predicts any certain amount of depreciation. At the same time he draws the conclusion, from the facts of the case, that there must be a fall in the value of gold in consequence of its greatly increased quantity. In this view he will be supported by all our great authorities on the currency, to whatever party they may belong.

There have been two schools in this country, on the monetary question, the one having at its head Lord Over-

stone, who has attributed great fluctuations in the prices of commodities to the action of the Bank on the currency; and the other, represented by the late Mr. Tooke, who maintained that, so long as the notes of the Bank were convertible into gold on demand, they could not become depreciated or cause a rise of prices. But the latter authority would have been as ready as the former to admit that any large addition to the quantity of *metallic money* must lead to a diminution in its value. It seems, however, that the disciple,* and, in a certain sense, the literary heir of Mr. Tooke, is pushing his doctrines beyond the limits prescribed by his eminent master. At a public meeting last summer, this gentleman is reported to have brought forward, as a proof that no rise had been caused by the new gold in the price of commodities in the years preceding 1857, the fact that, *at the time when he was speaking*, a great fall had taken place in the value of all articles of commerce. The circumstance, however, that, at the moment when he spoke, the country was still under the influence of the great commercial crisis which had occurred a few months before, rendered any such comparison of prices quite valueless. It is in the nature of things that any extraordinary rise of prices should be followed by such a rebound as we have lately witnessed. The only useful comparison that could be drawn is by comparing the range of prices, a few months after the panic of 1857, with the prices of a corresponding period

* Mr. Newmarch.

after the panics of 1825, 1836, and 1847. From the cursory reference which I have been able to make to the valuable tables in Mr. Tooke's work on prices, I am inclined to the opinion that the comparison would be found to confirm the views of M. Chevalier.

The accomplished author of the following treatise is already known among us as one of the most earnest of living writers in favour of free trade, and as the champion of every cause which tends to promote the progress of an elevated civilisation, and the best interests of humanity. He has qualified himself for the present task by a long and laborious study of the currency question, having given to the world some essays on *money* and the *precious metals*, which are recognised as standard works, and invest his name with an authority on such subjects, hardly second to that of Humboldt himself. In the following pages will be found almost every fact and argument necessary for the formation of an opinion on one of the most important problems of our day, and they are presented with all the care and conscientiousness for which the writer is so distinguished.

I wish I could believe, that either in the original (where a brilliant style is added to its other merits) or in the translation, this work will be read as widely as, from its great importance, it deserves to be. The very topic forbids such a hope. It is, nevertheless, a subject on which the early possession of knowledge, and the

exercise of forethought, will confer great advantages over ignorance and indifference, and afford the only safeguard against probable loss. It has been with the view to awaken public attention to a question which may involve the most important social consequences, and to offer greater facilities for obtaining information upon it, that I have undertaken the most humble of literary tasks, that of the translator, in presenting to the English reader the ablest and most complete treatise on the new gold discoveries.

R. C.

JANUARY, 1859.

CONTENTS.

SECTION I.

PRELIMINARY OBSERVATIONS.

	Page
CHAP. I.—The question stated.	1
CHAP. II.—Preliminary observations on the rise of prices which has characterised the last few years.	7

SECTION II.

AN APPEAL TO SOME OF THE FUNDAMENTAL NOTIONS UPON THE NATURE AND CHARACTERISTICS OF MONEY.

CHAP. I.—What we ought to understand by value and price.—Two-fold definition of money.—The standard or fineness of money.	10
CHAP. II.—Of the meaning of the word <i>standard</i> .—The metal standard is that from which is derived the monetary unit.—The two ideas standard and monetary unit imply each the other.	18
CHAP. III.—Of the character of exchanges as affected by the invention of money.—How the rise and fall of the precious metals are manifested in the course of trade.—Phenomena of the rise and fall in commodities.	20
CHAP. IV.—On the possibility of conferring the quality of standard upon two metals at once.	24
CHAP. V.—Of the meaning of certain words specially applicable to money and the precious metals:—Price, value, premium, dearness, cheapness.	32

SECTION III.

OF THE PRESENT PRODUCTION OF GOLD AND ITS OUTLET.

CHAP. I.—Of the increase in the present production of gold as compared with the past.—The extended coinage of gold which has followed.	40
CHAP. II.—Diminished coinage of silver in France.—Gold is already at a discount in comparison with silver.	46
CHAP. III.—Extraordinary exportation of silver from the civilised countries of the Western World towards India and China.—To what extent it is likely to continue.	51
CHAP. IV.—France serves temporarily as a parachute to retard the fall of gold.	60
CHAP. V.—Whether the extraordinary production of gold ought to be considered as an ephemeral accident.—The crushing of the quartz veins.—Mines in Siberia and elsewhere.	63

SECTION IV.

ON THE NEW OUTLET THAT MAY BE EXPECTED FOR THE PRODUCTION OF THE NEW GOLD MINES, AND WHETHER IT WILL BE IN PROPORTION TO THE EXTENT OF THIS PRODUCTION.

CHAP. I.—Of the outlet afforded by those countries which at present have evidently an insufficient proportion of metal in their currencies.	74
--	----

	Page
CHAP. II.—Of the increase of gold money which may arise from the development of business, and the increase of population.—Of wear and tear.—Of hoarding.—Of shipwrecks.....	80
CHAP. III.—On the employment which habits of luxury may offer to the gold of the new mines.....	92
CHAP. IV.—Conclusion of the preceding Chapters.—The fall of gold very probable, if not inevitable, in relation to all other commodities.	99

SECTION V.

CHAPS. I. to V.—On the part assigned to gold in the monetary legislation of France.	107
--	-----

SECTION VI.

CONSEQUENCES OF THE FALL IN THE VALUE OF GOLD.

CHAP. I.—A general distinction between those private incomes which will, and those which will not be, affected.—Of a certain collective loss which the people of France will suffer.	110
CHAP. II.—Of the sufferings and difficulties which will accompany the transition	114
CHAP. III.—On the gain which would result to certain classes of persons, and to society, from the fall in gold.—The saving to the State from the payment of the dividends on the public debt.	123

SECTION VII.

OF THE MEASURES TO BE TAKEN TO AVERT THE EVIL EFFECTS OF
THE FALL OF GOLD.

CHAP. I.—Case of a State like England, where gold is the standard, and where there is no other money but gold.....	130
CHAP. II.—Case of a State, such as France, where there is a silver standard, but also a gold currency.	134
CHAP. III.—The measure here recommended is a necessary complement of the law of Germinal, year 11.	150
CHAP. IV.—On some inconveniences inherent in the combination, respecting a gold currency, recommended in this work.....	153
CHAP. V.—Of a plan recommended for maintaining the parallel circulation of silver and gold.	156
CHAP. VI.—Of the resolutions of a commission appointed by the Minister of Finance in 1857.....	161
CHAP. VII.—Of various acts which the legislation of the ancient regime upon money treated as crimes, and with regard to which some persons of our day propose to establish penalties.—Selecting and melting; trade in coins; exportation.....	169
CHAP. VIII.—Of a different solution which has been recommended, and which would consist in the adoption of a gold standard.....	184
CHAP. IX.—Appreciation of the system which consists in adjourning indefinitely the legislative solution.....	195

SECTION I.

PRELIMINARY OBSERVATIONS.

CHAPTER I.

THE QUESTION STATED.

IF we go back in imagination three centuries, and picture to ourselves the most striking characteristic which the aspect of Europe then presented, we shall behold a universal excitement caused by the discovery of a new continent, which had been, sixty years previously, brought to light by a Genoese navigator, whose genius and persistent daring had been stimulated by a lucky miscalculation of the geographical position of China. In this new world, to which Columbus had traced the path—not merely for *Castille* and *Leon*, as is alleged in the inscription placed on his tomb by the tardy gratitude of posterity, but for the whole civilised world—mines of gold, and afterwards of silver (especially the latter), of unheard of richness, presented themselves to the cupidity of the conquerors. The most enterprising spirits of the Iberian peninsula hastened across the ocean to possess themselves of treasures, the splendour of which had been exaggerated in their excited imaginations; and they

were followed by a multitude of daring adventurers from all parts of Europe, who precipitated themselves on the coast of America, all in quest of mines of gold and silver.

It was in Peru and Mexico, the provinces containing the richest mines and the greatest supply of labour, that the precious metals were first obtained by an organised system of production. From 1492, the year of the discovery of the New World, to 1500, it is doubtful whether it yielded on an average a prey of more than 1,500,000 *francs* (£60,000) a year. From 1500 to 1545, if we add to the treasure produced from the mines, the amount of plunder found in the capital of the Montezumas, Ténochitlan (now the city of Mexico), as well as in the temples and palaces of the kingdom of the Incas, the gold and silver drawn from America did not exceed an average of sixteen million *francs* (£640,000) a year. From 1545, the scene changes. In one of the gloomiest deserts on the face of the globe, in the midst of the rugged and inhospitable mountain scenery of Upper Peru, chance revealed to a poor Indian, who was guarding a flock of llamas, a mine of silver of incomparable richness. A crowd of miners was instantly attracted by the report of the rich deposits of ore spread over the sides of this mountain of *Potocchi*—a name which for euphony the European nations have since changed to *Potosi*. The exportation of the precious metals from America to Europe now rose, rapidly, to an amount which equalled, weight for weight, sixty millions of *francs* (£400,000) of our day, and it afterwards rose even to upwards of eighty millions. At that time such a mass of gold and silver represented a far greater amount of riches than at present. Under the influence of so extraordinary a supply, the value of these precious metals declined in Europe, in comparison with every other production of human industry, just as would be the case with iron or lead, if mines were discovered which yielded

those metals in superabundance, as compared with their present consumption, and at a much less cost of labour than previously, just in fact as occurs in the case of manufactures of every kind, whenever, by improved processes, or from natural causes of a novel kind, they can be produced in unusual quantities, and at a great reduction of cost.

This fall in the value of gold and silver, in comparison with all other productions, revealed itself by the increased quantity of coined metal which it was necessary to give in exchange for the generality of other articles. And it was thus that the working of the mines of America had necessarily for effect a general rise of prices; in other words, it made all other commodities dearer.*

The fall in the value of the precious metals, or that which means the same thing, the general rise of prices, does not appear to have been very great, out of Spain, till after the middle of the 16th century. Shortly after the commencement of the 17th century, the effects of the productiveness of the new mines, and of the diminished cost of working them, were realised in all parts of Europe. For the silver, which had been extracted in greater proportion than the gold, and on more favourable terms, the fall in value had been in the proportion of 1 to 3. In transactions where previously one pound of silver, or a coin containing a given quantity of this metal, had sufficed, henceforth three were required.† At Paris a quantity of wheat, which we now

* This phenomenon, sufficiently clear in itself, will be still further explained in Chapter III. of Section II.

† In assigning this proportion, it is hardly necessary to say that I assume other things to be equal; I mean that other articles were in the same abundance, and produced under the same circumstances as before. For a commodity which might have become relatively more abundant, and of which the process of production should have been improved, there would have been a cause for the reduction of price, and this cause would have to a certain extent counterbalanced the dearness caused by the fall in the value of the metals from which money is coined.

call a *hectolitre*, cost, before the voyage of Columbus, from 12 to 15 *grammes* weight of silver, which is the metal contained in from 2 *francs*, 67 *centimes*, to 3fr. 33c. (2s. 6d. to 2s. 9d.) This quantity was henceforth worth at least from 45 to 50 *grammes*, or the silver contained in from 10 to 11 *francs* and upwards (of our money, 8s. 4d. to 9s. 2d.); it was even much higher, for some time, at Paris, after the first quarter of the 17th century. The change in gold, although obvious, was not so great as in silver.

After having been arrested for awhile in this downward course, and even after having witnessed for a time a tendency to an upward movement, the fall in the value of the precious metals, and the corresponding rise in prices, resumed their course, under the influence of the same causes, until towards the end of the 18th century, without, however, manifesting their influence so widely or intensely as had been witnessed after the first development of the great American mines. We find, as the result, that during the first half of the 19th century, the value of silver fell to about the sixth of what it was before the discovery of America, when compared with the price of corn, which people have agreed, somewhat arbitrarily it must be confessed, to take for a fixed measure of value. The *hectolitre* has sold on an average, during this half century, at Paris, for about 20 *francs* (16s. 8d.), or 90 *grammes* of silver.

In our day we seem destined, like our fathers of three centuries ago, and from the same causes, to witness the spectacle, or in other words the shock and crisis, of a universal rise in prices;—with this difference, however, that up to the present time the new discoveries affect only the production of one of the precious metals, gold, of which vast deposits of immense richness hitherto unknown have been successively discovered and attacked with astonishing impetuosity. In California, in the very year when the

rule of an industrious people, full of energy and intelligence, superseded the drowsy authority of a handful of monks maintained there by Mexico, splendid mines of gold were opened upon the banks and in the beds of rivers watering the valleys in which San Francisco is situated, and no sooner were they heard of than they were vigorously assailed by crowds of settlers who threw themselves headlong upon the spot from all parts of the world. This was in 1848. In three years more, beyond the great ocean, the continuation of the magnificent mines of California was discovered in Australia. In that remote region, a gold-seeker, who had made his first essays in the neighbourhood of San Francisco, discovered treasures not inferior to those of the vaunted valleys of the Sacramento, and the San Joaquin. But California and Australia do not contain the only rich mines towards which the civilised world of our day have stretched forth an active and greedy hand. It is about thirty years ago that those auriferous slopes, known to the ancients, and revealed to us in a narrative, fabulous though it be, by the father of history, but forgotten by the generations who succeeded him, began to give forth a notable supply of gold in Northern and Eastern Russia, among the Oural Mountains, and especially in Siberia, where the field of enterprise is almost boundless. The gold regions of the Empire of Russia, of which Herodotus had given us a description, tinged with the dreams of romance, were only re-discovered by the moderns in 1774. It was in the chain of the Oural that the first discovery was made, and to which the workings were confined till a very recent year. The riches of these mines were, however, but slightly developed till after 1810. In 1816, the production was only about 96 *kilogrammes* of metal (£13,440). From 1823 a progressive increase took place. In 1830, the production, according to official accounts, was 5,779 *kilogrammes*, or about 18 millions of *francs*

(£720,000). About this time, the auriferous deposits of Siberia became known, and from 1840 they yielded a far greater mass of gold than that extracted from the mines of the Oural.

Under the influence of this greatly increased and cheapened production of gold, it is reasonable to expect, at least in all those countries where gold circulates in large quantities, and where it is or tends to be the sole medium of exchange, a general disturbance of prices, a deeply-felt derangement of interests, and a modification more or less radical in the different relations of society. To examine the causes and consequences of such a revolution, and the good or the evil which, if they have not already commenced, must hereafter spring from it, can hardly be deemed an unprofitable task. With reference to certain countries, and more especially France, it is well to consider how far this influx of gold into the monetary system is in conformity with existing laws, with the intentions of the legislator, the national honour, and the respect due to engagements contracted by the State. If it were proved that what is taking place is in violation of the spirit and letter of legislation, the best means should be sought for returning as quickly as possible to the scrupulous observance of the law.

The work which I offer to the judgment of the public will naturally divide itself under different heads. In the first place let us try to form an idea of the chances of a rise in prices, of the forces which tend to produce that result, and of those which are calculated to prevent it; and next let us see in what sense we ought to understand the monetary legislation of France, and what steps should succeed to the solution of this problem. Afterwards, we will pass to a brief explanation of the principal inconveniences which, in a political and social, as well as in an economical point of view, will attend a general rise of prices, caused by the depreciation of gold, as well as of the advantages which society and

the State may derive from such a depreciation to compensate for the disorganisation it must occasion. We shall conclude with an attempt to decide what arrangements will be proper for preventing or diminishing the evil effects of an extraordinary production of the precious metal.

Simultaneously with these new discoveries of gold, a fact of grave import develops itself with reference to silver. For a few years past this metal has become, in the European market, the object of unusual demand for exportation to the East. This is evidently calculated to make the fall in gold more sensibly felt, especially in comparison with the other precious metal; for whilst the gold increases rapidly, silver becomes more scarce, and thus the divergence operates from both sides. We could not dispense with a brief investigation of the change going on in the demand for silver, were it only to endeavour to estimate its probable duration, and to form an idea of the influence which it is likely to exercise upon the fall, apparent or real, in the value of gold. The natural course of this work will soon furnish an occasion for this investigation.

CHAPTER II.

PRELIMINARY OBSERVATIONS ON THE RISE OF PRICES WHICH HAS CHARACTERISED THE LAST FEW YEARS.

BEFORE entering upon the consideration of the mode in which the new gold discoveries must be considered as the probable cause of the general rise of prices, in the countries where gold is by law or practice the monetary standard, it may not be out of place to say a few words in order to avert a possible confusion. This dearness is not a fact appertaining to a future more or less distant; the present time is

characterised by an all but universal rise of prices, at least it has been so up to the reaction which dates from the close of 1857. There are few productions which had not risen in price during the last five or six years. Even after the violent crisis which shook the four quarters of the globe, the high prices of several articles are still sustained. Many persons have not hesitated to attribute this unyielding rise to the influence of the new gold mines. I do not deny that the unusual production of this metal may have been in part the cause; but other causes may be mentioned which have weighed considerably in the scale.

Speaking of a great number of productions of the first necessity, of the raw materials of industry, and consequently of manufactured articles, especially of those upon which the price of the raw material exercises the greatest influence—they are in general the commonest qualities—we may trace a rise in price quite distinct from that which could have arisen from an increased production of gold. It arises from the fact that, in the case of these raw materials or manufactures, the relation between the supply and demand in the market, which necessarily decides the price, has undergone a great change. The demand having surpassed the supply, the consumer has found himself placed at the great disadvantage of being obliged to buy in a dearer market. This rise in prices, special and distinct in its horizon, must be attributed to causes which in their effects at least, if not in their very nature, are transitory.

In the first place, it may be traced to the fact that various classes of society have indulged in an increased consumption, either from their having greater resources, or from their habits of economy having undergone an unfavourable change. In France, a great number of persons have been enriched by the immense rise in the value of railway shares, and they have set an example of extravagance which has not wanted imitators.

As respects the working classes, the impulse given to public works, and to various industrial undertakings, has caused an extraordinary demand for their labour, and the consequent increase in their wages has enabled them to consume a greater quantity of certain articles of subsistence, and of those manufactured products which are most accessible to the masses of mankind. One of the effects traceable to this cause is the high price of butcher's meat which we have lately witnessed in France.

In the next place the moderate, not to say the inferior harvests, have in later years been a sufficient reason for the high price of many articles. Bread and wine have risen because of the scarcity of corn, and of the disease which has ravaged our vineyards. The rise in bread has produced a similar effect upon other articles of ordinary subsistence. A raw material in great use among the manufacturers of Europe, silk, is one of the objects which have undergone the greatest advance ; and this also has arisen from a failure of the crop in the Western World. This has been sufficient to account for the high price of the woven fabrics, for the cost of the raw material is a principal, if not the very first element, in the price of silk goods.

Moreover, it cannot be doubted that a spirit of wild speculation has spread itself more or less throughout the commercial world, and that this has not been without its effect upon the prices of some commodities.

I only allude to these circumstances lest we should confound the effects, which must be regarded as accidental and transient, with the results produced by the new discoveries of gold.

In the following pages, I shall generally reason as if these new gold mines had not yet produced any appreciable effect. I trust I shall not be blamed for this reserve. It strikes me that it will not weaken the conclusion to which this work will lead,—but have a contrary effect.

SECTION II.

AN APPEAL TO SOME OF THE FUNDAMENTAL NOTIONS UPON THE NATURE AND CHARACTERISTICS OF MONEY.

CHAPTER I.

WHAT WE OUGHT TO UNDERSTAND BY VALUE AND PRICE.—
TWOFOLD DEFINITION OF MONEY.—THE STANDARD OR
FINENESS OF MONEY.

IN order to clear the ground as much as possible, it may be well, before entering further upon our task, to call attention to some fundamental notions upon the subject of money, which may be found more or less ably expounded in almost every treatise upon political economy. I repeat them here, however, that I may spare such of my readers as have not these writings fresh in their recollection the trouble of referring to some special work for information.*

* We know that France is of all the countries of Europe, or of Christendom, that in which political economy is the least taught. There are but two professorships : the one public, that of the College of France, and the other restricted to a special class of functionaries attached to the school of the Board of Works. Everywhere else, whether in Europe or America,

Gold and silver are articles of commerce, that is to say objects having relations to our wants, and which are bought and sold. Like all other commodities, they have their own peculiar value for which they are in request; and this demand, arising from their utility, combined with the circumstances of their production, and particularly of their quantity, determines their *value*.

Let it here be observed that *value* is a word the meaning of which is relative, inasmuch as the attribute to which it relates always implies a comparison. If I say that meat is worth twice as much as bread, I establish a relation between these two articles; and in thus expressing myself I compare meat with bread.

When we speak of the *value* of an object, we ought for the sake of a rigorous precision in expressing our meaning, to point out the other object with which we compare it. It is true that very often it is understood that we compare it with the generality of other commodities;* or pretty frequently, indeed, it is the *price* that is meant.

The *price* of a certain thing is its *value* in relation to a substance specially designated, that is to say to the material of which money is made. Thus, whilst in ordinary language we often confound these two words *value* and *price*, and use them as synonymous terms, they have in reality a distinct

each university has at least one chair of political economy; this will be found equally in Russia and in England, in Prussia and in Spain. The little kingdom of Portugal supports three professors of political economy. In France, instead of extending, we seem to be curtailing this useful branch of instruction. The chair of industrial economy, which was filled with such success by M. Blanqui, at the *Conservatoire des Arts et Métiers*, and which, as its title indicates, was devoted to but one branch of political economy, has been suppressed since the death of that brilliant professor. Another chair has been founded in its place, but it has been, by an accident no doubt, filled by a person whose chief claim to public attention consists in the propensity he has shown to throw insults on political economy and those who study it.

* It is this meaning which must be nearly always accepted in the course of the following arguments.

meaning. Both have a relative sense; but *value* is a more general and indeterminate expression, or, to use a better word, more vague; *price* is more special, and has a meaning perfectly precise.*

Money is a certain commodity out of which we create an instrument that serves, in exchanges, as a common measure of value, because it is with it that, in transactions, all other commodities are compared. But it is not merely a measure; it figures in exchanges in another capacity, that of a material recompense or equivalent. The twenty *francs* with which a *hectolitre* of wheat can ordinarily be bought, and which are also at the present moment the price of a *hectolitre* of common wine in many departments, give me the measure of the value of the wheat and wine, as compared with other commodities of which the price is known; but they do more, they serve, at the moment of the transaction, and in the market where it takes place, as an equivalent for the *hectolitre* of wheat or the *hectolitre* of wine. We must, therefore, guard ourselves from viewing money as simply and purely a *representative* sign of value, although this meaning is sanctioned by usage in nearly every class of society. Money is not a sign; each piece of money is a certain fixed quantity of a definite fineness, very real and very effective, of the metal of which money is made; and it is no more true to say that the twenty *francs* are the sign of the *hectolitre* of wheat or the *hectolitre* of wine than it would be to pretend that the *hectolitre* of wheat or wine is the sign of the twenty *francs*. The definition of the word money which I have given, namely, that it is at once a measure and an equivalent, is that which is acknowledged by all

* On the subject of the true meaning to be attached to the word *value*, I entreat the reader to consult a work of the highest order, for which we are indebted to one whose premature loss the student of political economy will long deplore;—I allude to the "*Harmonies Economiques*" of Frederic Bastiat.

modern authorities. It is remarkable that it should agree exactly with that which Aristotle has given us.

"It was agreed," says he, "to give and to receive a substance which, useful in itself, was easily transferred from hand to hand in the ordinary transactions of life; it was iron, for instance, or silver, or some other substance of which the size and weight were in the first place determined, and on which, to escape from the inconvenience of continual measurings, a particular stamp was affixed as a sign of its value."*

From the moment that man forms a society—and how can we conceive it otherwise?—money becomes necessary to him. The division of labour, by which the sociability, as well as the different aptitudes, of mankind is manifested, has existed ever since a few individuals were grouped together, and it has been developed in proportion to the progress of civilisation. It subjects man to the necessity of exchanging, incessantly, the material products of his labour, or the services which he is in a position to render, against the productions and the services of others. If money did not exist, this exchange could only be carried on by barter. The man who had harvested his corn, and was in want of a pair of shoes, would be obliged to seek a shoemaker who had not supplied himself with corn, and was willing to deal with him. And even when he had found one, he would have had to bargain with him as to the proportionate value at which the article of clothing he wanted, and the corn he desired to sell, ought

* Aristotle, *Politics*, Book I., Chap. III.—This definition of the word money is that which Lord Liverpool has given in his treatise "On the Coins of the Realm." He probably derived it from a work by Mr. Harris, Assayer General of the Mint, which appeared in two parts in 1757 and 1758. This valuable pamphlet, entitled "Essay upon Money and Coins," has just been reprinted under the auspices of the London "*Political Economy Club*," in a volume of old tracts upon money, with a preface by Mr. McCulloch, whose eminent qualifications are known to all political economists. (For the definition of money, by Mr. Harris, see p. 370 of the above volume.)

to be exchanged. From the moment when, among all kinds of merchandise, one article has been selected to serve as a standard by which the relative prices of all others may be measured, in other words where money is used, transactions become simplified and facilitated. "In a system of barter," says M. Roscher,* "how difficult it would be to find exactly the man in a condition to be able to supply our wants, and at the same time to have occasion for our superfluities ! How much more rarely would it happen that the want and the superfluity met each other in equal proportions, that, for example, the manufacturer of nails, who wished to barter his goods for a cow, should find a grazier who had occasion for as many nails as would pay for a cow." Again, says the same writer :—"Under this system, the strongest party, in an economical sense, would, in every bargain, enjoy an advantage much greater than he possesses at present ; the buyer of bread, for instance, might be half-starved before he came to terms with a baker upon the price of the articles he had to offer him in exchange."

When once the use of money is adopted, the grower of corn exchanges his product for a certain quantity of money which is its price, and with this money he afterwards goes in quest of any other commodity for which he has occasion to those who make it the object of their industry. At first view it might seem that the use of money complicates transactions, inasmuch as it necessitates two exchanges, where otherwise there would be but one ; but, in truth, its use is of enormous advantage, and we should take an immense step backwards in civilisation if we were to return to barter. It has been wisely said that there is no machine which economises labour like money, and its adoption has been likened to the discovery of letters.

* *Principles of Political Economy* ; translated, with notes, by M. Wolowski, Book II., Chapter III.

Gold and silver were not, in the earliest stages of society, invested with the attributes of money. In their primitive communities men resorted for a medium of exchange to those objects which were more immediately at their command, as, for example, cattle. But almost from the very dawn of civilisation it was some kind of metal, and especially copper, which served the purposes of money. In proportion as society advanced, first silver, and then gold, became the instrument of exchange, and it may be said that, from time immemorial, these metals have been chosen as the preferred commodities, the constant intermediaries in transactions. For this purpose, they offer a combination of advantages which no other product possesses to anything like the same extent.

1. In the first place, these commodities are very much prized by mankind.
2. Independently of the facility with which they can be coined, they are more portable than almost any other products, that is to say, within the same weight and volume they comprise a greater relative value.
3. Of all bodies they are the most unalterable.
4. They are completely homogeneous, and being substances simple in their nature, their verification is easy. It is even not difficult to ascertain that which is called the *standard*, in other words the degree of fineness, or the proportion which each ingot contains of pure metal exempt from all alloy.
5. They are very easily divided, so as, in case of need, to represent small values without thereby impairing any of their advantages; for the detached pieces can be reunited almost without expense; and, on the other hand, they can be separated very cheaply from most of the combinations into which they can enter with other substances, and particularly so from their union with other metals.
6. They are admirably adapted for receiving a delicate impression, which they faithfully preserve, and this, added to their sonorous quality, affords an almost infallible test by which to recognise with

readiness their value. Finally, they are less liable than other commodities to the influence of those causes which might tend to lower or to raise their value. Undoubtedly, their value varies in comparison with other goods, but this almost always arises from causes belonging to these, and is not attributable to motives originating with themselves.

Originally, in the operations of buying and selling, the quantity of gold or silver delivered by the buyer of a commodity to the seller was weighed by the parties. Afterwards, to simplify and shorten transactions, certain discs of unvarying size were invented, containing quantities of metal fixed by law, which, by being struck or moulded, received an official stamp serving for a public voucher of the weight of fine metal contained in each piece of money. For a long succession of ages, all the nations of the West have adopted this system in the constitution of their currency, whilst, on the contrary, the most populous and the most civilised nation of the East has remained faithful to the old system of weighing,—the same as was practised by the patriarch Abraham, when he paid for his burial ground ; by King Priam, when he ransomed the body of his son Hector from Achilles ; and by the ancient Egyptians. Nevertheless, in China, of which I was about to speak, to give to the operations of commerce a security which the process of weighing in the time of Abraham did not sufficiently afford, since there was no assurance there that the pieces of metal put into the scales were absolutely pure, or of a known degree of purity, another process has been added. The metal is tested by an assayer, by which means the quality as well as quantity of each ingot or fragment is known. In a word, in every commercial transaction in China, the metal counts *both for its quantity and fineness*. The various pieces of silver which there pass from hand to hand are ingots of a certified weight and fineness like our own money ; but there is this difference, that

with the Chinese the certificate of quality and quantity emanates from individuals, whereas in Europe it comes from the government, and, moreover, in China the weight and standard are variable from ingot to ingot, whilst in every country of Europe they are fixed for each description of coin.

Let us insist upon this truth, which may be given for another definition of money—a definition that can hardly be kept too much in mind, for it carries with it the refutation of many sophisms which have borne disastrous fruits in times past, and which some persons would still like to revive from the oblivion in which they appeared to be buried ; pieces of money are merely ingots of uniform weight and fineness for each description of coin, and certified as such by government, by means of an impression which it stamps upon them. They are so much and no more. Government places its mark on them in order to attest their uniformity, but there its mission and its duty end. The form which it gives them, the effigies and inscriptions with which they are impressed, are of precisely the same character as the marks stamped upon silver plates or spoons, and which are a guarantee* that the government has verified its fineness.

* It has been the custom for governments to levy a tax on plate and jewellery, in addition to the cost of affixing these stamps ; but for the convenience of commerce it is necessary that nothing of the kind should take place in the case of money, and all the civilised states of our day recognise this principle and act upon it.

CHAPTER II.

OF THE MEANING OF THE WORD *STANDARD*.—THE METAL STANDARD IS THAT FROM WHICH IS DERIVED THE MONETARY UNIT.—THE TWO IDEAS STANDARD AND MONETARY UNIT IMPLY EACH THE OTHER.

IN the preceding chapter the reader may have remarked the expression *the matter*, or the *substance of which money is made*. Nevertheless, in most countries, it is not of one material that money is made ; but pieces of gold and silver circulate together indiscriminately. Yet it must not from that be assumed that the two metals, gold and silver, figure in the monetary system with the same prerogatives. We are about to call attention to a word of which it is important to fix the meaning,—I mean the term, *standard*.

On this subject it is necessary to guard ourselves against a certain confusion of language. Some persons apply the name of monetary standard to pieces of a metal to indicate that they cannot be refused in payment. That is not the way in which the word standard will be employed in the course of this work, nor is it its legitimate meaning. When it is the privilege of a metal that the coins of which it is made cannot be refused in payment, it is because it is endowed with the attribute of *legal tender*, which is very different from that of the standard.

When it is said that such or such a metal is the standard, it means that the *monetary* unit is a certain weight, settled once for all, of this metal, which is, however, quite reconcilable with a state of things where coins of another metal might be equally a legal tender. Thus in France, at the present time, gold is a legal tender, although silver alone is the standard, and constitutes the sole monetary unit.

In a word, *standard* and *monetary unit* are terms allied in the closest manner to each other, and they are synonymous the one with the other, as far as the materials of which a thing is made can be confounded with the thing itself. Beyond that the word *standard* has but a vague meaning, and its indecisiveness may give rise to all sorts of errors and misunderstandings. Let it be added that, in questions of money, mistakes, when sanctioned by government, resolve themselves of necessity into injuries, falling on this or that legitimate interest,—into injustice and iniquity more or less disastrous in its consequences.

The most rigorously exact meaning, perhaps, of the word *standard* would be to say that it is the monetary unit, the latter itself being defined by the three following conditions : the metal of which it is composed, its weight, and its fineness. It is in this sense that we shall sometimes use it in the course of the following pages ; but more frequently it is to the metal itself, constituting the monetary unit, that, for brevity of language, we shall assign the attribute of the standard. The circumstances themselves, under which we shall introduce the expression *standard*, will render any double meaning impossible.

From the intimate and almost indissoluble connection that exists between the idea of the standard and the monetary unit, spring consequences not unimportant. If, for example, we observe the legislation of a particular State, where, too, the government is fully alive to the conditions essential to a sound system of currency, in other words, is convinced of the necessity of having one standard, and not two ;* and if, in the tendency of the laws thus brought under our notice, we find the institution of a monetary unit expressly designed in such terms as these,—such a weight of such a metal, of such

* This point will be established in Chap. IV. of the present Section.

a fineness, constitutes this unit, doubt is no longer possible, it is not even permitted ; the metal in question is alone invested with the legal attribute of the standard.

This last observation may to some persons seem like a truism, which it is superfluous and almost childish to utter, so completely is it in accordance with proof. Yet it will be seen, by-and-bye, that it is not so needless as it appears, for it has escaped the notice of certain persons in the controversy which is now going on respecting the monetary system of France.

CHAPTER III.

OF THE CHARACTER OF EXCHANGES AS AFFECTED BY THE INVENTION OF MONEY.—HOW THE RISE AND FALL OF THE PRECIOUS METALS ARE MANIFESTED IN THE COURSE OF TRADE.—PHENOMENA OF THE RISE AND FALL IN COMMODITIES.

THERE is another point of view in which exchanges have been to a certain extent modified by the invention of money, and which it may not be unnecessary here to notice ; it has permitted the postponement of payments which were almost always made promptly under the system of barter. Thus the door has been opened to all those transactions in which credit performs its part. In return for what may have been received in the form of a variety of goods, or of different services, a party who, indeed, may be a city, a county, or a state, is enabled to bargain to pay, after a certain interval, a number, fixed at the time, of pieces of money, that is to say of metal. In many cases, but particularly where the con-

tracting party was, as has been said, a city, a county, or a state, the engagement to pay has taken the form of a rent or annual interest, consisting of a quantity of metal exactly agreed upon. In such a case, the fluctuations in value which, owing to time and circumstances, the metal of which money is made might undergo, would possibly affect seriously the interests of the debtor or creditor.

If the value of the metal declined, the creditor would suffer a loss upon the quantity he had to receive ; if, on the contrary, it rose, the debtor would have to pay more than he had calculated upon. In this manner it would seem that the chances between debtor and creditor were about equal. There is, however, a general cause which forbids a perfect equality. Doubtless we are correct in saying that the precious metals, of which money is made, are liable to fluctuations, which as often raise as depress them in value, although in this respect they possess a certain relative stability which we vainly seek in any other products of human industry. But there is a general cause tending to produce a depreciation, which, by its continuous action, prevails finally over the accidental causes which create fluctuations in their value. I speak of the unceasing progress of the arts. The working of the mines is ever an improving industry, and the same law of progress applies to the metallurgic processes for separating the metals from the rude ore which is extracted from the bowels of the earth. If, therefore, the mines continue always of the same richness, and there were no decided disturbance in the relation between supply and demand, the cost price of a given weight of gold or silver would constantly diminish with the lapse of ages ;— and since, at least with a great and fluctuating disproportion, between the supply and demand, the value of an article varies pretty nearly in conformity with its cost price, the value of gold and silver should, under this influence,

experience a constant decline. Thence springs a process of depreciation obviously disadvantageous to the creditor, which operates gradually, or rather in a series of rebounds, but against which there is no safeguard from the time that contracts are payable in gold and silver,* a custom now all but universal. Here, at least, is a reason why, in a wise spirit of equity, we should preserve for creditors all the favourable chances which legitimately belong to them.

It is rarely that circumstances occur, proper to the two metals of which money is made, which in a marked degree affect their value; they arise from changes in the conditions of their production, and the consequent supply in the market. It cannot be too often repeated that the very rarity of these occurrences is one of the principal reasons why gold and silver are more suited than any other commodities to perform the part assigned to them in commercial exchanges. Still, circumstances of this kind do recur at certain intervals with much violence. The most memorable example that can be cited is that of the discovery of the mines of gold and silver in America. History, however, records a certain number of similar events, regarding which the reader is referred to the works that specially treat of the matter.†

The effects of a rise and fall in the precious metals are displayed in a manner peculiar to themselves, owing to the attribute of money with which they are invested. When it is said that a commodity falls in value, it means that we

* To meet this, a plan has been recommended, and sometimes put in force, of paying in specified measures of corn instead of gold or silver, where the contract extends over a long period, or where it involves the payment of perpetual rents or annuities. These stipulations have, in some instances, endured for centuries in England, and the annuitants interested have derived great advantage therefrom.

On this subject, Lord Liverpool's treatise may be consulted with advantage. He cites, in particular, some examples of rents payable to colleges at Oxford and Cambridge.—(Page 117, edition of 1805.)

† See among others, the *Principles of Political Economy*, by M. Roscher, translated by M. Wolowski, Vol. I., Book II., Chap. IV., p. 338.

must give a larger proportion of it than previously to procure in exchange the same quantity of any other article of commerce. The price of that article, whether it be iron, lead, corn, wine, or any other product, excepting the metal or metals of which money is made, falls accordingly ; for the price of a thing is its value, specially compared with those metals, or, to express differently the same idea, it is the number of monetary units which it is necessary to give in exchange for a certain weight or volume of another commodity. A diminution in the value of the metal from which money is essentially coined is shown differently, in this respect that its *price* remains the same ; but then the price of all other commodities, without exception, rises if its value compared with itself has fallen, and falls if it has risen. I say that its price as measured by itself remains the same, since, for this metal, specially and exclusively, the price is its value compared with itself. If, for example, the value of silver falls one half, as the monetary unit, the *franc* consists, in France, of four *grammes* and a half of silver,* a *kilogramme* in weight of fine metal will still be worth 222 *francs*, 22 *cents*, because one *kilogramme* contains four *grammes* and a half, 222 times and a small fraction ; but in this case the price of lead, iron, wheat, wine, and all other commodities will be doubled, because, to obtain the same quantity of these articles, it will be necessary to give double the quantity of silver.

* When in the course of this work we speak of a fixed weight of gold or silver, without indicating its degree of fineness, the reader will be pleased to bear in mind that we mean those metals when absolutely pure and free from alloy. It is this which is ordinarily meant by the standard of 1,000 *milliemes*. We know that the standard of fineness of French coins is 900 *milliemes*, or nine-tenths, that is to say that they contain one-tenth of alloy.

CHAPTER IV.

ON THE POSSIBILITY OF CONFERRING THE QUALITY OF
STANDARD UPON TWO METALS AT ONCE.

INASMUCH as money is at the same time a measure of value and an equivalent, common sense would seem to tell us how more than difficult it must be to have two monies, equally invariable, and permanently in use together ; for how could it be possible for a given quantity of merchandise to have for equivalent indiscriminately a certain quantity of gold and a certain quantity of silver, which should always bear the same relation to each other, seeing that there is not and cannot be a fixed relation between these two metals ? The value of gold and that of silver depend, in fact, to a large extent upon circumstances peculiar to each of them, they being identical in this respect with iron or copper, bread or meat. It would, doubtless, be an exaggeration to say that they are absolutely independent of each other ; for whenever two substances have a common use, the value of one exercises a certain influence upon that of the other ; but between gold and silver this relation is not closer than that between corn and wine, or between bread and meat. Now, who has ever maintained that so close a connection exists between these two products that the price of one being given, that of the other can thereby be determined ? It is now a long time since Locke has said,—“Two metals such as gold and silver cannot serve at the same time, in the same country, for the medium of exchange, because this medium ought to be always the same, and retain the same proportionate value. To adopt, as a measure of the exchangeable value of commodities, substances which have not a fixed and invariable relation to each other, is as if we were to choose for a mea-

sure of length an object which was subject to the process of distending and contracting itself. In each country there should be but one metal to serve for the money of account, the payment of contracts, and the measure of value."

Even before Locke had thus expressed himself, the same idea had presented itself to the intelligence of mankind, and been carried out in practice. At the origin of a metallic currency,* it was only one metal that was endowed with the attribute of money. It was not the more vulgar of the two to which was always reserved the particular appellation of the precious metals. It was here iron, and elsewhere copper. We know that for many centuries, copper constituted the money of Rome.† Afterwards, society having become richer, copper money was no longer sufficient; with the increase of wealth, payments became too cumbrous, and a more valuable metal than copper was found better adapted for the bulk of transactions; it was thus that silver money came into use. This was soon after followed at Rome, and for the same reason, by a gold currency, and thenceforth the two metals continued to co-exist.‡ The history of the currencies in the monarchies which were reared upon the ruins of the Roman Empire reveals the same process. The first man of genius who then arose, endowed with a commanding spirit of reorganisation, Charlemagne, took for his monetary unit the pound weight of silver. A gold currency made its appearance in France

* In a great many countries, metals were preceded as instruments of exchange by other objects. Thus, in Rome, we are warranted by the very word *pecunia* in believing that different articles of merchandise were valued and paid for in heads of cattle.

† The foundation of Rome dates from the year 753 B.C. Silver money was not introduced till five centuries later (269 B.C.)

‡ Copper thenceforth performed but a subsidiary part; it did not, properly speaking, constitute money, that is to say, both an equivalent and a measure. With the Romans, as with us, copper coins were thenceforth merely tokens, inasmuch as they had a value in exchange greater than their intrinsic value; but then, as now, they were merely used for the smallest payments.

under St. Louis, and from that time the two metals have, whether for good or evil, circulated side by side of each other. In England, William the Conqueror established also for his monetary unit the pound of silver, of the Saxon or Tour weight; and it was only under Edward III. that a gold currency was established. In the extreme East, at least in China, silver has from the first continued to be the sole instrument of exchange for all commercial operations on a great scale. In India, silver is the prevailing money; gold formerly filled a secondary place in the currency throughout the vast territories of the East India Company, in the form of coins, bearing the name of *mohur*, which had been given them by the ancient Moguls; but at present they have been completely demonetised by the Company.

In itself, the desire to make gold and silver circulate together in the currency of a State is justifiable upon good reasons, and equal value of the one being much more portable than the other; but, on the other hand, being little suited for small sums, owing to the risk of the coins slipping out of sight, a division of their employment seems to be indicated,—for silver the smaller, and for gold the larger payments, especially when they pass from hand to hand. Each metal thus having its special use, the idea of employing both, which has been found to prevail in almost all countries, has really a reasonable origin.

But the question of a simultaneous circulation of the two currencies being decided in the affirmative, others presented themselves:—On what conditions and in what form should this process be carried out? Should the two metals be treated alike, and invested with the same dignity? In a word, should each of them be the standard, or, what comes to the same thing, the monetary unit? The preceding statement shows that this duality of the monetary unit would be opposed to the very nature of things. It might

absolutely be possible to have for unity of length simultaneously the *metre* and the foot, because the relation of one to the other is fixed and invariable. It would be very different, however, with two weights, one of gold and the other of silver, which should have been determined, once for all, as the measures of value. The relation of one metal to the other is variable, and has never ceased to vary, more or less, from the commencement of the world.

Unfortunately, however impracticable it may be to treat money as though each of the two metals constituted equally the monetary unit, that is no reason why it should not have been resolved upon in times of ignorance, or under governments disposed to believe, in their greediness, that this combination would be more favourable to the frauds which it suited them to perpetrate on the currency.

If people had not, wilfully or otherwise, forgotten whence money is derived, and if submitting to the nature of things, which, in such matters, cannot be thwarted with impunity, they had laid down the principle that one of the two metals was the standard, that is to say, the substance constituting the monetary unit, the other would then have been quite obviously a subordinate metal, and this subordination itself would have permitted it to have been devoted, in various forms, to uses not necessarily the same for gold as silver, as we shall have occasion to show in the course of this essay. The confusion, real or simulated, which has so long and so often prevailed on the subject of the currency, in official quarters, is the reason why we have departed from that simplicity which would have averted much embarrassment, but which would also have subjected governments to the laws of honesty, a burden which they have found it difficult to bear. In fact, however, governments have incessantly undertaken the task of fixing the relative value of gold and silver, according to the effective value of the two

metals compared one with the other. Hence have sprung many changes in the currency. Unfortunately, as these changes have been, in the majority of cases, effected without regard to recognised principles, or rather in contempt of all principle, they have occasioned much disorder, and led to many evils.

The plan of a double standard, or the system of placing gold and silver absolutely on the same footing in the currency of a State, would be an injustice as regards all creditors, who would always be paid in that metal which should happen to be at the lowest value at the moment when the payment fell due. As we have already said, the adverse risk to the creditor is from the fall of the material from which money is made, whilst the debtor has, on the other hand, to encounter the chance of a rise. Where there is but one standard, and provision is made that the legal value of the coins of the other metal shall be in conformity with the quotations of its value in the metal market (I here argue upon the assumption, which is true in most countries, that the two metals are used for money), the debtor and creditor have equal chances,* and, whatever happens, neither of them has the right to complain of being the victim of an injustice. But if, instead of establishing one standard, the law assigns this attribute to two metals, or if, which amounts to the same thing, neither of the metals is invested with the attribute, the equality of chances ceases between the debtor and creditor. The latter has in effect against him all the chances of a fall which one or the other metal may undergo. If it be the national creditor, for example, he will lose, in the first place, by the fall in the value of silver, and he will encounter a second loss when the same process takes place in

* Excepting, however, the inequality before alluded to, as consequent on the progress of the arts.

gold. In order that the debtor should, on the contrary, sustain a loss, it would be necessary that the two metals experienced at the same moment a rise, which is a tolerably improbable occurrence.

However striking may be the inequality established between the situation of the debtor and creditor, by the system of the double standard, which might, I repeat, be more properly described as no standard,—that is not the sole or even the strongest objection to which it is exposed. If the two metals are equal before the law, that is to say, if it be not declared that one is the standard, and the other for subservient uses, the government, having the power, will yield to the temptation, of manœuvring with the one and the other; for, governments being proverbially always more or less needy, they will find the way of relieving themselves of a portion of their engagements, by discharging their debts with whichever of the two metals shall have had the greatest relative fall in value. It will only be necessary, for example, to compare, alternately, the value of gold with that of silver, and the value of silver with that of gold, to diminish successively the burden of the national debt, thereby injuring the public creditor, outraging public morals, and causing great derangements to private interests. Thus, when gold shall have risen in value in comparison with silver, the State will only pay in the latter metal, and private debtors will not fail to follow the example: the law will have authorised them to do so. Fortune changes; rich mines of gold are discovered; gold instead of being worth fifteen-and-a-half times its weight in silver, is worth only fourteen times, afterwards thirteen, and then falls to twelve, and even to ten. Things are left to take their course, and some fine day, under pretext of confirming an established state of things, a law decides that the relation between the two metals, instead of being expressed by the number $15\frac{1}{2}$, shall be expressed by

14 or 13. Some time afterwards this proportion is altered to that of 10. By virtue of these successive combinations, the silver coins, the value of which had remained stable, are melted again and again, and each time greatly diminished. The debtor henceforth acquits himself with one *kilogramme* of gold, or with ten of silver, whereas the creditor had thought he was to receive fifteen-and-a-half of the latter metal, or an equivalent quantity of gold.

A little later, the silver mines are more productive, the production of that metal begins to increase, and its value to fall ; now follows another deviation : from the relation of 1 to 10 there is a rise successively to that of 1 to 12, 13, 14, 15, $15\frac{1}{2}$, or even beyond if the comparison between the market value of the two metals warrant it. Then the State and other debtors discharge their debts only in silver ; or, if they pay in gold, it is a quantity diminished, compared with what they would have paid during the preceding period, in proportion to the fall in silver. Another oscillation reduces the value of gold ; this depreciated metal then becomes the preferable type, and it is made the standard of comparison for silver, the coins of which lose another portion of their weight. These double-dealings are perpetrated by virtue of a law, against which, whatever may be thought by those who regard it from an impartial and equitable point of view, there is really nothing to be said from the moment that we recognise the fallacious principle of a double standard. At each change the creditor is deprived of something, until with sufficient time it ends in his losing nearly everything.

Supposing this scene to be enacted in a country where the *franc* is in use, this coin which originally contained five *grammes* of silver of nine-tenths fineness, is successively reduced till it contains but four, then three, and always less and less. This alternate adjustment, by virtue of which, under the false theory of a double standard, the depreciated

metal is always practically the type, would be a new mode of arriving at precisely the same result as was sought and obtained by the ancient princes when, stealthily or boldly, they mixed copper with their silver, or altered, by proclamation, the pound in their established coinage. In this manner, with the principle of a double standard, the *franc* might be reduced to the seventy-second part of a *franc*, just as the royal clippers and coiners of olden times degraded the pound to the seventy-second part of a pound by the continual admixture of the baser metals.

We will explain more clearly this result by a hypothetical case. The *franc* being 5 *grammes* of silver of the standard of nine-tenths fineness, the equivalent in gold consists actually of $32\frac{1}{4}$ *centigrammes*, of the same fineness. If in consequence of gold falling to ten times its weight in silver, it be decided that the *franc* shall still remain equal to this quantity of gold, then the silver must be recoinced so that the *franc* shall comprise only $3\frac{1}{4}$ *grammes*, of the same fineness of nine-tenths. Suppose that silver in its turn falls; if the fall be such that the relative value rises to $15\frac{1}{2}$, and if in the system of the double standard, $3\frac{1}{4}$ *grammes* of silver for the *franc* is to be preserved, then the gold ought to be recoinced, so that there shall not be more in one *franc* than 21 *centigrammes*. A fresh fall in gold following, if it be such that to restore the relation of 1 to 10 between the two metals, a similar operation is necessary, the *franc* will then only contain 2 *grammes* and one-tenth of silver. Thus it will be seen by how rapid a process the currency of a country may be swallowed up.

Nothing more need be said to induce us in our day to resist all the efforts which, under various pretexts and forms, are made to restore the double standard to favour, or to revive it in practice.

For the very reason that the plan of a double standard

leads, by the deduction of an irresistible logic, to consequences so manifestly contrary to an equitable security of contracts, it is right in studying the monetary system of a country to require the clearest and best proofs before deciding that it is avowedly founded on the principle of a double standard. For it is, in fact, to declare that the legislators of such a country are, in monetary affairs, guilty of ignorance or of injustice and bad faith, and such an imputation ought not to be made excepting on sufficient grounds.

CHAPTER V.

OF THE MEANING OF CERTAIN WORDS SPECIALLY APPLICABLE TO MONEY AND THE PRECIOUS METALS:—PRICE, VALUE, PREMIUM, DEARNESS, CHEAPNESS.

BEFORE bringing these preliminary generalities to a close, and entering upon the core of the subject, I beg to be allowed to define the true meaning of some expressions which are frequently used in our day in discussing the question of the currency. On this point we find persons who are not without influence on public opinion, deluding themselves with phrases of dubious meaning, and it is against this danger that I would wish to warn the reader, and those persons themselves.

The expressions which I have here more particularly in view are those of *value* and *price*, applied not as has already been done to commodities in general,* but especially to the currency, and the precious metals of which it is made. I

* See Section II., Chap. I.

allude also to the expressions *premium*, *dearness*, and *cheapness*, taken in relation to the same objects,—the currency and the precious metals.

In ordinary language, the words *value* and *price* are often used as synonymes. They are different, however, in their meaning, as has been already shown in reference to commodities in general. It is well here to define this difference in regard to the currency, and the precious metals of which it is made. It is such that one could indicate instances where, if the value of one of the precious metals fell, its price would rise. This is not a scholastic subtlety, imagined for the amusement of triflers; it is a fact presented to us even in vast proportions, in history. Thus, from the time of the discovery of America to our day, the value of gold in ingots or in coins has certainly diminished, since at the present time a given quantity of gold in coins or ingots is exchanged for a smaller quantity of corn, or of other ordinary products, or for fewer days labour. However, the price of gold, in silver money, has increased; and in thus expressing myself, I do not allude to the circumstance of the coins having been altered, to such an extent that the weight of metal which was denominated a silver pound, under Saint Louis, would have made twenty pounds under Louis XVI. A rise in price of this kind is only nominal. That which is meant, and which is incontestable, is that, supposing that the currency in France had never been altered, and that its coins had continued of the same weight and fineness as in 1492, the year of the first voyage of the great Genoese navigator, the gold coin which would then have exchanged for ten or eleven silver coins of the same weight would in the nineteenth century have regularly exchanged for fifteen or sixteen. In a word, the *price* of gold has positively and effectively risen, from 1492 to our day, in the ratio of $10\frac{1}{2}$ to $15\frac{1}{2}$, whilst its *value* has declined.

The price of a thing, as has already been said, is its value

in relation to money. When the precious metals are in question, it is convenient to distinguish between ingots and coined money, and also to particularise the species of money in which the price is measured. If, for example, I speak of gold, I am bound for clearness not only to indicate whether I refer to the ingot or the twenty-franc piece, but also whether I reckon the price in silver or gold coins. Assuming the coinage to be accurately struck, a fair assumption in these days when the operations of the Mint are brought to such perfection, and that every piece of gold is of full and equal value, then the price in gold currency, of a thousand *francs* of gold coin, or say fifty pieces of twenty *francs*, can only be a thousand *francs*. But the price of an ingot, containing, weight for weight, and fineness for fineness, the same quantity of gold as the fifty pieces, may according to circumstances exceed them in value. It would be worth more if, under circumstances of real or supposed exigency, there were a great demand for ingots for coining at the same time that there were very few on offer in the market. It is a case which occurs but seldom, but which has happened in our day. Thus, between the 1st July, 1855, and the 1st January, 1858, the Bank of France purchased at a premium gold to the amount of 1,363 million *francs* (£54,520,000), the premium on which in some instances amounted to 15 per 1,000. The sum total paid by the Bank for premiums, in this interval of two years and a half, exceeded fourteen million *francs* (£560,000).*

* On this subject some persons are of opinion that the Bank submitted to terms which might have been avoided. Without noticing in detail all that has been urged in this sense, I may call to mind the information afforded by Lord Liverpool (p. 150, edition of 1805, of his treatise on the English currency), that when the Bank of England in 1797 struggled with all its might to avoid a suspension of specie payments, she purchased no gold above the money standard, that is to say at more than £3. 17s. 10½d. an ounce, of metal of the legal fineness. For the twenty years that preceded the suspension of specie payments, the average of the price paid by her for gold was 2½d. an ounce under the standard or Mint price.

On the contrary, the ingot will be worth more than coins of the same metal, always assuming them to be of full weight and fineness, when bullion flows to the Mint to be coined. Its destination being the coinage, it is natural that it should be at a disadvantage in comparison with coined money to the extent of the expense of the operation, including the loss of interest during the time that the bullion is retained at the Mint. The case now indicated, in which the ingot sells for less than an equal weight of coined metal, is that which usually presents itself to our view in European countries.

Another case, in which the ingot may be worth more than coins, is that of a country, for example, where a gold currency abounds, and from which this metal may be exported to other countries in which the coins of the exporting State are not current. It might be more advantageous in such a case to export ingots than coins, or, to express the same thing in other words, it might be necessary to convert the coins into ingots before forwarding them to their destination ; then the ingot would necessarily be worth more than the coins, weight for weight, and fineness for fineness.

A directly opposite case to the preceding is that where the money of the exporting country enjoys, through prejudice or otherwise, great favour in other regions. Commerce then finds it advantageous to withdraw coined money rather than ingots from the country, to transport it to those regions. Hence a sufficient reason why the money should be at a greater or less premium over the raw metal. It is thus that Spanish dollars, especially those called *pillars*, were, and still are, in great request in China, and pass in some localities at a value quite disproportioned to the quantity of metal they contain. There needs no other motive why they should be sought for, not only in the country of their production, but all over the world, and paid for in ingots at a premium.

It would be a very different hypothesis from the foregoing, to suppose that the coins have become worn by the process of circulation, so as to have lost an appreciable part of their weight, as always occurs after the currency has remained a long time without being renewed. It is quite clear that, in such a case, an ingot of gold, containing weight for weight, and fineness for fineness, the quantity of metal contained in fifty perfect twenty-franc pieces, would be worth more than fifty of the same pieces when rendered light from excessive usage. Consequently, the price of an ingot in the current coins would be at a great premium. But then the fifty twenty-franc pieces, withdrawn from the circulation, would not really and substantially be pieces of twenty francs. They would be simply pieces of nineteen francs, or eighteen francs, to which, by an abuse of language, or by the neglect of the authorities to resort to a recoinage, they had preserved the name and the currency of twenty-franc pieces.

It is needless to add that what has been said of coins and ingots of gold, applies equally to silver coins in relation to ingots of silver, and *vice versa*.

Examples of differences of this kind between the price of ingots and that of coins of the same metal abound in history. To observe the phenomenon in all its simplicity, and, if I may so speak, in all its purity, it is better to consult the history of England than that of other states, because out of England, the facts relating to the currency have been almost everywhere complicated with the incidents of a falsification of the standard. In England, then, the reduction in the intrinsic value of the currency by the passage from hand to hand, a loss to which the *sweaters* of coins have not failed to contribute their proportion when once they have ceased to possess their full legal weight, has sometimes been so great that the ingot corresponding legally with a certain number of coins, contained a quarter, a third, or even a half more of

metal than these did, taken from the average of the current circulation. It followed that the ingot bore an enormous premium, a premium, moreover, which was quite apparent. This is what befel the silver currency in the reign of William III. before the recoinage of 1695. The ingot of silver was at a great premium in the current coins of the same metal ; indeed, the English gold coin so well known under the name of the guinea, and which was at that time of good weight, passed for much more than its value in shillings. From the moment that the silver money had been recoinued, and was thus perfect, the premium which the ingot had gained disappeared ; that of the guineas, in relation to the silver money, fell to the insignificant amount which corresponded to the slight difference in the market quotations for these two metals, and the current value conferred by law or usage upon these gold coins as compared with good silver money.*

It is not an uncommon thing in France to hear it affirmed that gold has lost none of its value since the discovery of the Australian and Californian mines, and as a proof the fact is cited that, in the market of Paris, ingots of gold are at par, or at least that they are only at a small premium. Persons who reason thus fall into a confusion, which, however, it becomes necessary to treat with some care, for men of very distinguished talent have fallen into it ; I will soon quote an example. To know with certainty whether gold is dearer or cheaper, whether it be at a premium or not, the method is not to compare ingots of this metal with gold coins. Between the ingot and coins of full weight and fineness there can only be by accident a sensible difference. It is limited, in fact, by the charge at the Mint, including the interest of

* See Lord Liverpool's treatise, p. 69. There is also a very interesting exposé of the monetary situation of Great Britain at this time, in the brilliant *History of England*, by Lord Macaulay, Chap. XXI.

capital during the interval of time absorbed in the process of coining. A better, and the only good measure of the rise or fall occurring in the value of gold is that which takes place in its price in silver money, or, which amounts to the same thing, in the price of silver ingots in gold coins; and then it must be premised that no disturbance shall have arisen to cause a sudden change in the value of silver.

Thus, at the present time, the very decided premium which silver is acquiring, represents exactly the divergence that has occurred between gold and silver, for this premium indicates the excess of the price of silver as compared with the legal par in gold coins. Now, for how much does the fall in gold enter into this divergence? and for how much the rise in silver, if any rise have really taken place? This is not the question at present under discussion, and if it were, I doubt the possibility of solving it with any precision in figures. I have merely wished to point out the error into which some persons fall who try to estimate the exact rise or fall of gold by comparing the market price of ingots of this metal with the coins into which they are or may be converted.

This error, however, occurs, without any qualifying circumstances in Lord Liverpool's treatise.* After demonstrating that silver has a less stable value than gold, that statesman, gifted nevertheless with a rare intelligence, estimates the variations which gold and silver commodities had undergone, by a reference to their price in current money, at a time when the currency consisted exclusively of gold or of bank notes convertible on demand into gold. One could hardly succeed in finding a device better calculated to persuade the mystified reader that silver alone undergoes

* Page 149; edition, 1805.

any variations, and that gold by some inexplicable privilege escapes all appreciable alterations. Such a mistake, on the part of an authority of so high an order, whose good faith moreover is above all suspicion, shows how much attention must be brought to the study of the currency, and to the qualification of monetary facts, if we would avoid vulgar errors, and not become the dupes of false appearances.

SECTION III.

OF THE PRESENT PRODUCTION OF GOLD AND ITS OUTLET.

CHAPTER I.

OF THE INCREASE IN THE PRESENT PRODUCTION OF GOLD AS COMPARED WITH THE PAST.—THE EXTENDED COINAGE OF GOLD WHICH HAS FOLLOWED.

AT the commencement of the century, the quantity of gold yielded by the various countries, whose production flows to the general market of the civilised Western* or Christian States, was about 24,000 *kilogrammes*† of pure metal (about £3,312,000).

But to arrive at this quantity it is necessary to include the production of several countries which then had but little commercial intercourse with the principal nations of Christen-

* The word Western is here used in contradistinction to the extreme East, which consists of remote Asia, and especially of India and the Empires of China and Japan.

† I prefer using *kilogrammes* of fine gold rather than *francs* in the statement of accounts. Fewer figures will be required, and they will be more easily compared with one another. The *kilogramme* of gold, by the terms of the law 7 Germinal, year 11, is equal to 3,444 *francs* 44 *cents* (£138.)

dom, as, for instance, the Island of Borneo, and several other localities in the Indian Archipelago. Confining himself to the production of the American continent, of Europe, and of Asiatic Russia, M. von Humboldt calculates that it then amounted to 15,800 *kilogrammes** (£2,180,400). It is doubtful if the gold which the civilised Christian nations drew from other sources, and especially from Africa, added to this supply a weight of 2,000 *kilogrammes* (£276,000). We might thus estimate at 18,000 *kilogrammes* (£2,484,000) the amount of gold which, at the beginning of this century, arrived every year, to augment the metallic wealth of the nations of Christendom. It underwent very little increase until the working of the gold mines of the Oural, and afterwards of those of Siberia, contributed, with the aid of other secondary sources, to swell somewhat suddenly the supply to threefold the above amount. Thus matters stood at the commencement of 1848, when took place the discovery of the rich deposits of California, destined to be so soon followed by a similar event in Australia. At this moment we may estimate, in round numbers, the mass of gold furnished to the Christian States at 275,000 *kilogrammes* (£37,950,000), if not more. The increase, then, is at the rate of 1 to 15 in the course of forty years, and nearly in the proportion of 1 to 5 since 1848. In silver, on the contrary, there has been but little change. The production, at the beginning of the century, was 900,000 *kilogrammes* (£7,965,000); at present it is estimated slightly to exceed a million *kilogrammes* (£8,850,000).

The real revolution which has taken place in the supply of gold may be expressed in another way. The region which, until the discovery of the mines of Siberia, was the chief seat of production for the European nations, I mean

* Essay on *New Spain*, Vol 3, p. 456 ; edition of 1827.

the whole continent of America, has, since the first voyage of Columbus down to the discovery of the mines of California, that is to say during the 356 years which intervened between 1492 and 1848, and inclusive of the gold extracted from silver ore as well as that from the gold mines, only produced 2,910,000 *kilogrammes* (£401,580,000) of pure metal. At this time the yield being nearly 300,000 *kilogrammes* (£41,400,000), the civilised world receives of this metal, in a single year, about the tenth part of the total which had been furnished by America from the first departure of Columbus down to 1848.

We might present under another form, perhaps still more striking, the productive power of the new auriferous deposits of California and Australia, by indicating the quantity of metal which a miner extracts in an average day's work. With regard to California, we have the Report of Dr. Trask, from which an extract has been given by M. Delesse, Inspector of Mines, in the *Annales des Mines*, third report of 1856 (5th series, vol. 9th, p. 649).* It is there seen that in 1854, by the labour of eight months, each miner produced a quantity of gold valued at 700 dollars (£140), or about 1,100 *grammes* of gold. At twenty-five days work a month, which is certainly an over-estimate, it is an average daily extraction of $5\frac{1}{2}$ *grammes* of gold, which, at the standard of French money, is 19 *francs* (15s. 10d.). An intelligent officer of the French navy, who, on his return from the second campaign of the Kamtschatka, travelled in the interior of California in 1855, and applied himself to the collection of some exact information, M. Armand Coste, gives the sum of 15 *francs* as the minimum of what a man can, on the average, gain at the mines, an estimate at least equal to that which I have just quoted from Dr. Trask.

* See page 80 of the Report of M. Trask.

In Australia, the situation of the miner is not less favourable. Thus in 1854, in the district of Ballarat, one of the most productive in the colony of Victoria, which is itself the richest in gold, the ordinary wages of a miner, according to the Parliamentary Return of 1856,* was 30 shillings a day. The sum of 15 shillings is indicated as the minimum in the same document; and these remunerations apply to the wages of a miner, which implies that the average produce of a day's work in gold is superior to the quantity of metal contained in 15 and 30 shillings, for of course, the capitalist who pays the labourer must have his profit. Hence we shall not exaggerate if we adopt for Australia as for California the sum of 19 francs (15s. 10d.) as the ordinary earnings of the miner. Nineteen francs! In passing, let us remark, what a contrast with the gold-washer of the Rhine, whose day's work yields him gold dust of the value of 1 *franc* 50c. or 2 *francs*† (15d. or 20d.), and who still follows the occupation! If, then, the auriferous regions preserved indefinitely the same richness, the value of gold might fall until the sum of 19 of our present francs in gold (15s. 10d.) was only equal to the ordinary price of a day's labour in California and Australia, after the cost of subsistence and the rate of wages should have there found their permanent level. Now, we are justified in concluding that in California and Australia, the day's labour must gradually be assimilated to the rate which prevails in temperate climates, among the most prosperous nations of Christendom, and which in our day is about five

* Report of the Commission appointed by the governor of the province of Victoria to report on the state of the mines. This report is comprised in the Blue Book, entitled—*Further Papers relative to the Discovery of Gold in Australia*. February, 1856.

† According to a curious memoir by the engineer of mines, Daubrée, which goes back for a few years, the washing of the auriferous sands of the Rhine is a branch of industry which still subsists, although for a long time it has only been carried on upon a small scale. The production amounts yearly to from 12 to 15 kilogrammes (£1,600 to £2,000).

francs (4s. 2d.)* It follows that the value of gold might fall till the weight of $5\frac{1}{2}$ *grammes* of pure metal, representing at present 19 *francs* (15s. 10d.), might correspond only to the amount of well-being which can in our day be procured for the quantity of metal comprised in five *francs*. By this calculation the fall would in the end amount to three-fourths,—in other words, to procure the same amount of subsistence as at present, it would be requisite, all other things being equal, to give a quantity of gold greater in the proportion of about four to one. According to this we are still very far from the end of the crisis.

I am far from saying that the fall will not, long before it reaches that point, encounter obstacles which will arrest it. Assuredly it may so happen in the very nature of things, and for example in the conditions of production. It is a subject on which I will shortly offer some further facts. But, at least, it seems to me quite incontestible that there remains a great margin of depreciation.

As regards the force, nay the violence, with which the new gold is diffusing itself through the monetary system of the civilised world, and particularly that of France, here are some facts which speak in a significant manner :—

During the government of Napoleon I. the coinage of gold amounted to 527 million *francs* (£21,080,000), or an

* The hypothesis here indicated, according to which the price of a day's work, in Australia and California, should finally fall to a sum representing in food and other enjoyments that which is procurable among civilised people in temperate regions for the sum of five *francs* in our day, seems reasonable. California and Australia are healthy countries, where the European race can labour, and where food ought to be, if it is not already, at a moderate price, either from the abundant production of the soil, or from the facilities for importation by sea. Doubtless, if the number of hands remained as insufficient as at present, the wages of manual labour would remain very high; but we know with what facility emigrants can be transported to the most remote regions, and new and more economical means of conveyance are now being organised between Europe and Australia, as well as between the eastern shores of America and California.

average of 48 million per annum (£1,812,000).* Under Louis XVIII., it was a smaller proportion, amounting to a total of 389 million *francs* (£15,560,000), or an average of 39 million per annum (£1,560,000). Under Charles X., a great decline is observable; for the whole reign the gold coinage amounted to only 52 million *francs* (£2,080,000). During the seventeen years of Louis Philippe's reign, gold was only coined to the amount of 215 million *francs* (£8,600,000), or 12½ millions annually (£500,000). The ascending reaction began to manifest itself in 1848, for, in the general distress caused by the revolution of that year, many persons carried their gold plate to the Mint to be converted into money; but the influence of the new mines is not perceptible till after 1850. During the period of eight years, ending the 31st December, 1857, the gold coined at the Paris Mint amounted to 2 milliards 750 million *francs* (£110,000,000), or an average of 343 millions (13,720,000) yearly.† During the period of forty-five years, comprised between the 7th *Germinial*, year 11, and the 1st January, 1848, it had only been 1 milliard 186 millions (£47,440,000), or 22,300,000 *francs* (£892,000) per annum. The greatest

* The coining of gold was only continued for eleven years of this reign. It did not commence till after the promulgation of the law of 7 *Germinial*, year 11.

† It may not be useless to know from year to year the progress of the coinage of gold in France during this period. It is as follows:—

	FRANCS.	POUNDS STERLING.
1850	85,192,390	3,407,695
1851	269,709,570	10,788,382
1852	27,028,270	1,081,130
1853	312,964,020	12,518,560
1854 ..	526,528,200	21,061,128
1855	447,427,820	17,897,112
1856	508,281,995	20,331,279
1857	572,561,225	22,902,449
Total francs ...	2,749,693,490	109,987,735

1858, during the first six months, £9,483,250.

amount coined in one year was in 1857, when it reached 572,561,225 *francs* (£22,902,449); next comes that of 1854, amounting to 526,528,200 *francs* (£21,061,128); and then we have for 1856 the sum of 508,281,995 *francs* (£20,331,279). In no other country does the coinage of gold attain these proportions, or anything like them. In England, where, properly speaking, gold alone constitutes the currency, the period of the last seven years, for which we have returns from January 1st, 1850, to the 31st December, 1856, presents only a total of £45,749,868 sterling, or an annual average of £6,535,605 sterling. This is a considerable increase upon the British coinage in the previous years; for, during the septennial period immediately preceding, the total of gold coined amounted to only £28,539,711 sterling, or a yearly average of £4,077,101; but the increase is far less than in France.

CHAPTER II.

DIMINISHED COINAGE OF SILVER IN FRANCE—GOLD IS ALREADY AT A DISCOUNT IN COMPARISON WITH SILVER.

WHILST in France the coinage of gold takes this unexampled development, the like process with regard to silver is diminishing, and bids fair to cease altogether. In the period of forty-eight years, from the 18th *Brumaire*, year 8, to 1848, there had been coined 3,891,000,000 *francs* in silver (£155,640,000), or a yearly average of 81,065,000 *francs* (£3,242,600). During the eight years, terminating the 31st December, 1857, the coinage has only amounted to 323,660,000 *francs*, or a yearly average of 40,457,000 *francs*

(£1,618,280.)* It should, moreover, be observed that the coinage of silver during the latter years has only taken place in consequence of the great influence exerted in that respect by the government upon the directors of the mints. Left to themselves, they would not perhaps have struck a single five-franc piece since 1853.

Not only is much less silver money coined, but even that which the country possessed has been rapidly disappearing. The Custom House returns afford upon this subject only proximate indications, as the declarations are not always exact, though they nevertheless must be taken for authority. Formerly, France imported much more of silver commodities† than she exported. It appears from a report made in 1839 to a commission on the currency, over which M. Thénard presided, that during the period from the 1st January, 1816, to the 1st January, 1839, the excess of the importation of silver over the exportation amounted to 1,822,824,818 *francs* (£72,912,992.) Nearly the same proportions were preserved until 1851, inclusively; but then commenced an inverse movement, which gathered strength every year.

In 1852, the exportation surpassed the importation by 2,700,000 *francs* (£108,000). In 1853, the excess amounted

* The following are the details, year by year :—

	FRANCS.	POUNDS STERLING.
1850	86,458,485	3,458,339
1851	59,327,308	2,373,092
1852	71,918,445	2,876,738
1853	20,099,488	803,979
1854	2,123,887	84,955
1855	25,500,305	1,020,002
1856	54,422,214	2,176,888
1857	3,809,611	152,384
Total.....	323,659,743	12,946,377

† That which here, and in the returns of the Customs, is named silver commodities, comprises both ingots and coins.

to 117 millions (£4,680,000). It rose successively to 164 millions (£6,560,000) in 1854; to 197 millions (£7,880,000) in 1855; to 284 millions (£11,360,000) in 1856; to 362 millions (£14,480,000) in 1857. From the 1st January, 1852, to the 1st January, 1858, the total excess of exportations over importations amounted to 1,127 millions (£45,080,000),* which would be about two-fifths of the silver money possessed by France a few years since, according to the opinion of many persons. There are not two ways, there is only one way, of explaining these facts: gold is imported into France in masses, and takes the place in the circulation formerly filled by silver, which disappears, because

* The following is a table of the importations and exportations of silver since 1846:

IMPORTATIONS:		
	FRANCS.	POUNDS STERLING.
1846	106,858,680	4,274,347
1847	138,307,280	5,532,291
1848	233,330,020	9,333,200
1849	291,414,760	11,656,590
1850	147,693,360	5,907,734
1851	178,629,800	7,145,192
1852	179,857,460	7,194,298
1853	112,568,040	4,502,721
1854	99,848,480	3,993,937
1855	120,891,400	4,835,656
1856	109,895,300	4,397,812
1857	97,408,440	3,896,337
Total	1,816,703,020	72,670,115
EXPORTATIONS:—		
	FRANCS.	POUNDS STERLING.
1846	60,086,980	2,403,479
1847	84,678,220	3,387,128
1848	19,396,560	775,862
1849	46,847,060	1,873,882
1850	82,308,900	3,292,356
1851	100,680,840	4,027,233
1852	182,574,720	7,302,988
1853	229,453,480	9,178,139
1854	263,542,200	10,541,688
1855	318,051,040	12,722,041
1856	393,518,600	15,740,744
1857	459,929,300	18,397,172
Total	2,241,067,900	89,642,712

it is profitable to come from abroad to barter gold for silver, on the footing of one *kilogramme* of the former for fifteen-and-a-half of the latter, the proportion established in the French currency,—for how long and under what qualifications, will be seen by referring to the law of 7 *Germinal*, year 11.

The merchant possessing ingots of gold has only to carry them to the Mint to obtain the same amount in pieces of ten francs or twenty francs, weight for weight, and fineness for fineness, save only the small charge to cover the expense of coining.* In this way every *kilogramme* of gold introduced into France, enters into the circulation on the footing, just described, of an equality with $15\frac{1}{2}$ *kilogrammes* of silver. The creditor is obliged to take it in discharge of his claim on that basis.

From the very fact of the parallel circulation of gold and silver, on the footing of one of the former to fifteen-and-a-half of the latter, it is easy to withdraw the silver coins from circulation, and export them, giving gold in exchange. From the moment that numbers of persons devote their time and capital to the carrying out of this substitution, we must conclude that it is a profitable trade, for, if the relation of 1 to $15\frac{1}{2}$ were not advantageous for the holders of gold, they would take good care not to carry on the operation upon the large scale on which they have proceeded.

To say that the exchange of a *kilogramme* of gold for $15\frac{1}{2}$ *kilogrammes* of silver is a profitable transaction, is in other terms to prove that in the general market of Europe, or rather of the world, the relative value of gold and silver has undergone a change. Their relation is no longer that of 1 to $15\frac{1}{2}$. Gold is no longer worth fifteen-and-a-half times

* The charge is 6 francs, 70 centimes (5s. 7d.) per *kilogramme* of coined gold, making 3,100 francs (£124).

its weight of the other metal. In the French market, silver is at this time at a premium; the bullion merchants will pay to those who bring them a certain quantity of coined silver, a certain sum beyond its legal equivalent in gold money, and the amount of the premium is the measure of the change which the relation of 1 to $15\frac{1}{2}$ has undergone. This premium is a notorious fact; it is quoted every day; every morning the newspapers announce it. During the last two years, it has varied ordinarily between 20 and 30 francs per 1,000. Sometimes it has been lower, but it has also risen to 40 *francs*. 20, 30, and 40 per 1,000, is 2, 3, and 4 per cent; such a difference, insignificant after all, has been sufficient to create the vast movement which has brought into France so much gold, and expelled by the reflux so great a mass of silver. It is a proof of the force with which the precious metals everywhere tend to find their level. The fact of gold being appreciated in France 2 per cent, or even less, is a sufficient reason why it should be precipitated upon the market of that country; on the contrary, let silver be depreciated to the same extent, and it will flow away with equal impetuosity.

Nor is there any ground for surprise at this kind of fluidity which characterises the two metals: the simple truth is they are commodities which in a small volume possess a great value, and which it is therefore easy to transport a great distance at very small expense.

CHAPTER III.

EXTRAORDINARY EXPORTATION OF SILVER FROM THE CIVILISED COUNTRIES OF THE WESTERN WORLD TOWARDS INDIA AND CHINA.—TO WHAT EXTENT IT IS LIKELY TO CONTINUE.

It is not only to the fall of gold that we must attribute the divergence which has exhibited itself in the reciprocal value of gold and silver, as regards the proportion of $15\frac{1}{2}$ recognised, under qualifications to be hereafter explained, in the law of the 7 *Germinai*, year 11. Undoubtedly, the enormous production of gold is in great part the cause of the phenomenon, but to a certain extent the origin may be found elsewhere. Simultaneously with the cause which has produced this divergence by lowering the value of gold, there is another, the activity of which cannot be denied, which raises that of silver. The value of silver rises at present, owing to the sudden demand for this metal for exportation to the remote East. According to the statements published by Mr. James Low, and derived from the books of the Peninsular and Oriental Steam Navigation Company, by whose agency nearly the whole of this precious freight is transported, the vessels of this company carried from England to Asia the sum of £12,118,985 in silver, in 1856; and of £16,795,232 in 1857. In 1851 it was only £1,716,100. Besides, from the ports of the Mediterranean, there have been sent to the Levant and the remote East (India, China, and the adjacent regions), in 1856, £1,989,616; and in 1857, £3,350,689. This is for the year 1857 a total of £20,145,921, that is to say, of more than double the yield of all the silver mines that supply the markets of the Western World, I mean of Europe and America. This efflux of silver is independent of an exportation of probably one-tenth of the

above amount in gold, which has been going on during the last few years. It is true that we ought to deduct from these exportations of silver to the East a certain quantity of imports, because, in these articles, alongside of the general stream there is always a certain counter-current. But we have reason to believe that for the last few years it has been but a limited sum; at any rate the amount is unknown to us.

To form a tolerably correct idea of the disturbance which the former relation of gold and silver has undergone, owing to the extraordinary demand for the second of these metals, it may not be amiss to recall to mind what have been in former times the exportations of silver from Europe and America to the Levant and the remote East.

From ancient times, the commerce of the civilised nations of the West with Asia, which passed by Suez, the Euphrates, or the Black Sea, involved the transmission of a certain quantity of silver which the Europeans gave in exchange for the spices and perfumes which they received. According to Pliny,* the quantity of silver which took this direction amounted to 100 millions of *sesterces*, which, according to the tables prepared by *Dureau de la Malle*, in his *Political Economy of the Romans*,† was equal to two millions and a half of francs (£100,000), or rather less than 2,000,000 (£80,000) as estimated by *Letronne*. In our day the trade between Europe and remote Asia is greatly developed. The Europeans draw from India cotton manufactures and indigo; from China certain manufactures of silk, and also tea, the quantity of which has since acquired great proportions. More recently, other manufactures, such as those of Cashmere, and later still, some further articles, including sheeps'

* *Natural History*, Book XII., Chap. XVIII.

† At the end of the 1st volume.

wool, have been derived from India ; on its side China has engaged in furnishing Europe with an additional supply of raw silk.

At the commencement of the 19th century, Baron Humboldt estimated that the mass of silver sent annually from Europe and America into Asia, both by sea and the land route which passes through Southern Siberia and the North of China, including even that which remained in the Levant, that is to say, the Mussulman ports of the Mediterranean, amounted to 25 millions and a half of dollars,* or 612,000 *kilogrammes* of pure silver, or 137 million *francs* (£5,480,000), which was nearly three-fourths of the silver then yielded by the whole of the mines of America. But even for the epoch to which it refers, this valuation should be regarded as altogether fortuitous : and, as an average for any particular period, it must be considered as greatly exaggerated.† More recently, Mr. Jacob has endeavoured to ascertain what the average drain of silver amounted to at the commencement of the century, by examining the valuable records of the East India Company, which then enjoyed the monopoly of the trade of Great Britain with India and China, and was moreover the medium through which the merchants of the United States remitted the precious metals to China,

* As follows :—

By the Cape of Good Hope	17½	millions dollars.
By way of the Levant		
(a portion remaining in		
the Levant itself)	4	„ „
By Southern Siberia and		
the North of China	4	„ „
Total.....	25½	millions dollars.

(Humboldt.—*Essay on New Spain*, Vol. III., p. 413. 2nd edition.)

† We are warranted in concluding, from the language of M. Humboldt himself, in the second edition of the *Essay on New Spain*, published in 1827, that, with his proverbial truthfulness, he has since discovered that the above estimate was excessive, even for the first years of this century.

but not to India. This conscientious writer estimates, that by the principal channel, that is to say, by the direct ocean navigation, Europe and America did not then export annually of the precious metals to India and China more than about 25 millions of *francs* (£1,000,000), and that even a very small part of this amount was in gold.* In admitting, without deduction, that the trade of the Levant and that through Siberia absorbed the sums indicated by Baron Humboldt, we should arrive at 70 millions of *francs* (£2,800,000), in lieu of 137 as the total at the commencement of the century.

After the first years of this century, notwithstanding the considerable extension which the peace soon gave to the commerce between the civilised regions of the West and Asia, the exportation of silver never increased to an extent to raise its value, for the merchants of the Western World had discovered other means of effecting their remittances. On this subject, all the authorities are unanimous. The official returns, published by Mr. Jacob, and the other information furnished by him, have led him to the conclusion that, from 1810 to 1830, the average exportation of the precious metals by sea, to Asia, both from Europe and America, did not exceed 50 millions of *francs* (£2,000,000), and it was less towards the end than at the commencement and middle of the period. It must, however, be remembered that of this amount a small portion consisted of gold. As respects the two other routes indicated by Baron Humboldt, that by land through Russia, and that by the Levant, including, in the latter, the silver which remained there, as well as the portion which reached the remote regions of Asia, Mr. Jacob observes that, at the period when he

* *An Historical Inquiry into the Production and Consumption of the Precious Metals*, Vol. II., Chapter XXIV., p. 196.

wrote, in 1831, it was no longer necessary to include in the estimate the amount of silver which flowed through those channels. The quantity of silver which passed from Russia into Asia, by Kiachta and Tobolsk, had fallen to nothing. The goods, chiefly woollen cloths, that Russia sold to the Chinese were equal in value to the teas and other products, which China sold to Russia, and it even left a small amount due to the Russian merchants, which the Chinese paid in silver. If, in their trade through Tiflis, the Russians were obliged to liquidate a certain balance with silver, it was an inconsiderable amount, and in any case it was, at least, compensated by the remittances which the Chinese made through Siberia.

As for the commerce of the Levant, or through the Levant, Mr. Jacob states that, at the time when he wrote, the exchanges of merchandise which were made by that route balanced one another.

Baron Humboldt himself, always ready to welcome the development of new facts, acknowledged, in the second edition of his *Political Essay on New Spain*,* published four years only before the work of Mr. Jacob, that the exportation of the precious metals to the destination of the Levant, of Hindostan, of China, and the adjacent regions, such as the Indian Archipelago, had considerably diminished, since the publication of the first edition of his work. He added, even, "It is now a generally received opinion, that Great Britain has created a reflux of gold and silver from the peninsula of India into Europe."

Thus, towards 1830, the remittances in silver, which the civilised Western World had to make to the Asiatics, were far from being extensive; they were certainly much below 50 millions of *francs* (£2,000,000). More recently, the

* *New Spain*, edition of 1827, Vol. III., p. 473.

amount was still further diminished, not only because the merchandise of Europe and America found a greater vent in Asia, but, above all, because the importation of opium into China operated powerfully to change the balance of trade. The commercial delegates who accompanied the French embassy to China, in some publications, prepared with great care,* establish the fact that after 1830 China came to be a much larger exporter than importer of silver; and they give as their estimate for 1842, that China would have that year imported a million of dollars, or five millions and a half of *francs* (£220,000), and exported 11,160,000 dollars, or 60 millions of *francs*† (£2,400,000); they add, that up to the time at which they wrote, that is to say subsequently to 1845, the commerce in opium alone had caused an exportation of silver from China, to the amount of about 20 millions of dollars, or 108 millions of francs (£4,320,000). Of late, the commerce with India and China has undergone great changes, or, to speak more properly, a violent shock. The Chinese government, by prohibiting the importation of opium, has sought in vain to destroy the trade, or even to restrain it. The civil war which is convulsing a large part of the Chinese Empire, by spreading disquiet and alarm, has caused a demand for the precious metals, because of all wealth they are the most easily concealed. In India, a formidable insurrection has threatened the British dominion, from which arose a disturbance in the exchanges between Europe and those vast possessions; and, besides, to meet the expenses, England has been obliged to despatch large quantities of silver to the seat of war. All these causes have

* See these documents in the *Annales du Commerce Extérieur*, a collection issuing from the department of commerce: they are to be found under the head of China and Indo-China, *Commercial Facts*, Nos. 13 to 20, particularly No. 13. Consult especially page 19.

† Page 18 of No. 13, as above.

operated in a manner to attract towards Asia a much larger proportion of silver than previously, and thus explain, to a certain extent, the unexampled increase which has during the last few years taken place in the exportation of silver from Europe and America into Asia.

The commercial relations of Europe and Asia have been, moreover, considerably modified by other circumstances. On the one hand, the bad harvests have compelled the people of Europe to resort to the East for rice; whilst on the other, the crop of silk having failed in France, Italy, and elsewhere, the silk manufacturers, so numerous in France, Switzerland, England, and Germany, have been obliged to resort for a much larger portion than heretofore of their raw material to China, where it is cultivated in great quantities; and we all know that silk is a very costly article.

It is under all these influences that the exportation of silver from the nations of the West into Asia has experienced, since 1852 and 1853, the enormous augmentation mentioned above.

It must be borne in mind that the magnitude of the amount of silver absorbed annually by Asia is of recent date; it is an unforeseen phenomenon which has abruptly presented itself, and one could not conscientiously take it for a fact definitely and unchangeably established; it would be exposing oneself too much to the risk of deception to assume that the present will be the rule of the future.

If asked formally to express an opinion as to what is likely to be the future in this respect, I should decidedly withhold it even with reference to an early period; it seems to me that there are insurmountable difficulties in the way of making a rational prediction on the subject, so numerous, and, moreover, so fleeting and intangible, are the elements which it would be necessary to take into account.

Doubtless India will soon return again entirely under British rule ; but will order be so speedily re-established, and will the exchanges with that country immediately resume their accustomed course ? On this point it would be premature to predict anything. And then will it not be necessary to maintain there, at a great expense, a large European army, which may, and indeed must, necessitate heavy remittances of specie ? Is it not also possible that India, restored to peace and intersected with railroads, which were in active progress before the insurrection, may soon become a great storehouse whence Europe may derive her cotton, the supply of which has been, up to this time, a monopoly in the hands of the United States ? That would be a powerful cause for the continuance of the flow of silver from Europe to the East Indies. On the contrary, is there not ground for presuming that the numerous population of India may become so changed in their social habits, under the vigorous administration of Englishmen, as to accustom themselves to the consumption of the manufactures of Europe and the United States, which would dispense with the necessity of their sending the precious metals in payment for the raw materials which are furnished by India, and thus tend to restore the exchanges to nearly the state in which they were about the year 1845 ?

As respects China, there is room for similar observations, but in a sense the opposite of each other. China offers to Europe raw materials of great value, and, especially, as has been seen, silks in immense quantities, as well as that article which has taken so important a place in the alimentary habits of the two great Anglo-Saxon communities. The exportation of tea from China to England, and its numerous dependencies, and also to the United States, has only acquired its interesting proportions within the period of a

century ;*—but in our day it is very considerable, and is constantly increasing. In return, the products of Western industry are trying to adapt themselves to the habits of the Chinese consumer ; aided by a recourse to the various productions of India, will they be sufficient to balance the amount of the productions furnished by China to the Western World ? When, one way or another, the civil war which now ravages the Celestial Empire shall have been brought to an end, and when the campaign undertaken by England and France to compel the Chinese government to renounce its system of isolation shall have succeeded, is it not credible that the 350 or 400 millions of industrious men, attached to the enjoyments of life, comprised in the Chinese provinces, will be inclined to adapt to their usages a multitude of commodities with which the trade of Europe and America can supply them ? In assuming it to be probable that such will be the case, how long will it take to put this new state of things, this vast system of exchanges between China and the people of the Western World, on such a footing that the productions bartered between the two parties shall balance, or nearly so, one another ? On this subject we can only hazard conjectures. It is clear, however, that the actual state of the exchanges which is balanced by the annual remittance to Asia of from 400 to 500 millions of *frances*

* The quantity of tea sold by the East India Company did not exceed a million of kilogrammes (2,200,000lbs.) until about 1750. From 1748 to 1759, the average annual sales of the Company were 2,558,081lbs. It is true that the Dutch and other nations also imported some tea from China. Of the above 2,558,081lbs., a certain portion was exported, which so far reduced the amount retained for consumption at home. At present the quantity consumed in the United Kingdom amounts to 63,295,643lbs. The 23rd volume of the large statistical work of Mr. John Mc.Gregor contains, on the history of the trade in tea, a chapter full of interesting details, to which the reader is referred (page 292). The *Annals of Foreign Trade* (No. 983 of the 3rd series of the *Miscellaneous Intelligence, China, and Indo-China, Commercial Facts*, No. 24), estimates at 169,443,786lbs. the total exportation of tea from China in 1855.

(from 16 to 20 millions sterling), by the Europeans and Americans, can only be regarded as accidental, and that it has not yet received that sanction from experience without which the facts ought not to be made the grounds of conclusions by enlightened men, or of the calculations of governments.

CHAPTER IV.

FRANCE SERVES TEMPORARILY AS A PARACHUTE TO RETARD THE FALL OF GOLD.

It is at first sight surprising that a production of gold so vast, so colossal as that which has been just described, in comparison with all that has been seen previous to our day, should not have produced a greater fall of gold relatively to the other precious metal. The surprise redoubles if we take into account the enormous increase that has taken place in the demand for silver in the European market, or, more properly speaking, in the whole Western World, for exportation to the East. But here a powerful cause has intervened to retard temporarily the fall of gold. France is a market which has hitherto offered to the gold of the new mines an indefinite outlet, on the basis of one *kilogramme* against $15\frac{1}{2}$ of silver; for the foreigner who owes a Frenchman a certain number of *francs*, that is to say a certain number of times $4\frac{1}{2}$ *grammes* of silver, acquits himself legally in paying him the same number of times 29 *centigrammes* of gold, a quantity $15\frac{1}{2}$ times smaller. As to the bullion merchant who wants

to exchange his gold for silver, he obtains it on nearly the same terms, for, beyond the quantity indicated by the relation of 1 to $15\frac{1}{2}$, he has only to pay the premium, and of necessity up to this moment it has been but slight, and must continue so some time longer, for a reason easy to perceive. So long as much silver remains in France, persons residing there who may receive coins of this metal will think themselves fortunate to exchange them for gold at a small premium beyond the relation established by the law of the 7 *Germinal*, year 11, because in the payments which they have to make they could not compel their creditors to take them for more than the proportion of gold indicated by this law, viz., 1 against $15\frac{1}{2}$.

Such is the actual effect of the provisions of the law of the 7 *Germinal*, year 11. We will not at present inquire whether the intention of the legislator was, that under the circumstances which now present themselves, this comparative value of gold and silver should be maintained; it is a subject to be hereafter discussed. But the truth is, that so long as the provisions of the law of the year 11, on this point, are allowed to remain, and so long as France shall continue to offer great masses of silver, the merchant will find it easier to barter his gold in that country for the other metal, on terms which will deviate little from those prescribed in the year 11. It follows also, whilst this state of things last, that it will be impossible, at London, Brussels, Hamburg, or even at New York, or any other great centre of commerce, for gold to fall much below $15\frac{1}{2}$ times its weight in silver. It is from the same reason that if, at any moment, when the price of corn tended strongly to decline, a Paris merchant bought in the open market all the corn brought to him at 20 *francs* the *hectolitre*, it would be impossible that at the market of Saint Denis the quotation should greatly deviate from the same price. But the aspect of affairs will be very different from

the day when the movement which at present attracts the silver of France, shall have led to the exportation from our territory of nearly all our five-franc pieces, and when, consequently, this money shall have become so rare as to render it impracticable, or even difficult, to exchange a *kilogramme* of gold against $15\frac{1}{2}$ *kilogrammes* of silver. From that moment the fall in gold will be rapid. In a word, if, down to the present time, the immense production, of which Australia and California have been the theatre, has not produced a greater fall in the value of gold, it is France which is the cause. It is she that has retarded the depreciation of gold. She plays, in relation to this metal, the part of a parachute, and she plays it at her own expense ; she will understand it well when the great fall occurs ; but then it will be too late.

That the premium on silver should have reached even 4 per cent, under the circumstances in which the trade in the precious metals is placed, seems to me to indicate the force with which gold tends towards a depreciation ; and they who argue from the slightness of the premium, that there is little ground for anticipating any great future change, seem to me to fall into a singular error.

We know that what is now to be seen taking place in silver, occurred a few years previously in gold. Gold was at a premium in the French market ; at the same time that the coinage of this metal had fallen to an insignificant sum, and the amount which had been in circulation in France was escaping abroad. The returns of the Custom House show that from the 1st January, 1816, to the 1st January, 1839, the exportation of gold exceeded the importation by 541,000,000 francs (£21,640,000), without counting that which travellers carried with them. During this period, the relative value of gold remained nearly fixed at $15\frac{3}{4}$ times that of silver, instead of the proportion of $15\frac{1}{2}$, indicated by the law of the 7 *Germinal*, year 11. Now $15\frac{3}{4}$ in relation to $15\frac{1}{2}$, represents

only a deviation of $1\frac{1}{2}$ per cent.* Such a slight divergence from the legal proportion, sufficed, however, to cause the disappearance of gold from the circulation, and to lead to the exportation of the larger portion of it. This proves how small a difference suffices to effect the displacement of the precious metals.

CHAPTER V.

WHETHER THE EXTRAORDINARY PRODUCTION OF GOLD OUGHT TO BE CONSIDERED AS AN EPHEMERAL ACCIDENT.—THE CRUSHING OF THE QUARTZ VEINS.—MINES IN SIBERIA AND ELSEWHERE.

THE new gold mines, will they continue to be what they are? The abundance of metal, will it remain indefinitely the same, and will there be always the same facilities for working it? To sum up in a word, will the production remain as great, or, like a meteor, will it dazzle for an instant suddenly to disappear? On this subject, there might be room for a long controversy, of which the result must still be liable to some uncertainty, owing to the want of sufficiently precise and authentic information. However, we are warranted in saying that the continuance of a large production presents itself in the perspective, surrounded with a very great probability.

* In this interval, the value of gold never rose above $15\frac{80}{100}$ or $15\frac{81}{100}$, excepting during a part of 1829, and the four following years, 1830-1-2-3. It may be concluded, at least for the last four years, that the agitations in France were the cause of this rise. In times of alarm, there is usually an extraordinary demand for gold, owing to the facility with which it can be concealed.

Eminent geologists, at the time when the first news of the marvels of California arrived, remarked, with truth, that the alluvial deposits in which gold is found, and on which to the present day nearly all the successful workings have been carried on, are liable to speedy exhaustion. They, on that occasion, reminded us that many countries have had, in the earlier period of their civilisation, mines of gold and silver, and that after a short time all remains of them disappeared, even to the extent of leaving no traces of their existence in the traditions of the inhabitants. Might not this be taken as a warning of the early exhaustion of the mines of California and Australia.

There are very striking calculations to be produced in an opposite sense. Supposing that the soils the most advantageously workable of these regions yield in gold the hundred-thousandth part of their weight,* it would be necessary for obtaining one *kilogramme* of metal, to wash 50 cubic metres of gravel or sand. It follows that, supposing an auriferous bed to be of the thickness of a *metre* (about 39 inches), then a *hectare* (about $2\frac{1}{2}$ acres) will have been exhausted with the extraction of 200 *kilogrammes*, and that thus an annual extraction of 120,000 *kilogrammes* of fine gold, which, on the basis established by the law of the year 11, would be equal to 400 millions of francs in gold coins (£16,000,000), would exhaust 600 *hectares*; and 60,000 *hectares* would be sufficient for an extraction, at this rate, of a century. Now 60,000 *hectares* are only half the area of one French depart-

* This is the quality or rather the yield (which is very different when worked in an inferior manner) of the rich fields of production in Siberia. In the Oural mountains they wash with success sands which contain only a fourth or a fifth of the above proportion, that is to say one *kilogramme* in 400,000 or 500,000. In the valley of the Rhine, the most favoured spots, those which the gold-washers hunt for, and on which they concentrate all their efforts, contain only 1 *kilogramme* in 7 millions. According to various accounts, the yield of good soils in California and Australia is often as much as 1 in 100,000.

ment,—a very small space in comparison with the total superficies of countries so vast as Australia and California. The conditions in which the deposits of ore are found in California and Australia are such that it is not a very sanguine view to suppose that in each of these countries alluvial ground will be found, equal to 60,000 *hectares* of deposits of a *metre* in thickness, and of the richness of 1 to 100,000. There are several ways in which such a field of operations may be arrived at, for it must be borne in mind that frequently these auriferous banks are much more than a *metre* in thickness ; nor must it be forgotten that their richness may greatly exceed that of 1 to 100,000. In fact this return is not the minimum below which the extraction would necessarily cease to be profitable ; it is very far from it. There have been worked, and are now being worked, in all the auriferous regions, some banks, the produce of which is not one-fifth or one-sixth as much as the above.

It will be readily conceived, after the considerations I have submitted to the reader, that we should soon exhaust the deposits in those countries where the auriferous ground was very limited in extent, and was only met with in the bottoms of valleys. But that is not the case in California, or Australia. The golden alluvions are there spread over a far wider space ; they are found not only on the banks of rivers, and in their beds, but are scattered over the surface of vast plains.

It has been seen also that hitherto the miners of Australia and California have confined themselves to the more tempting deposits, that they have been skimming the cream, and that henceforth they must expect their work to be much less productive. There is, undoubtedly, some truth in this observation. But then it must also be remembered that they have not yet explored the whole surface, and that there is reason to believe that, in California and Australia, there

are many rich and extensive deposits still to discover ; indeed, they are constantly in the course of discovery. It may also be urged that, if the natural facilities for extraction do not remain unimpaired, the processes of working may be so improved as to compensate, in some degree, for the diminished fertility of the mines ; and this improvement is not something appertaining to the remote future ; it is a fact which is realised every day. The report of Dr. Trask shows a marked increase in the productive force of the miner between 1852 and 1854. On the contrary, in Australia, in the colony of Victoria, the most important of all the mining districts, the commission which presented the report already referred to describes the deposits as declining in richness continually from 1852 to 1854 ; but, at the same time, it reckoned on the improved processes of extraction for compensating to some extent the impoverishment of the mines, even if the falling off were to be permanent, which is doubtful ; subsequently to this report, that is to say in 1855 and 1856, the results of the workings appeared to have improved in Australia.

It is a fact, however, upon which there is now hardly room to doubt, that the miners will no longer confine themselves to the washing of the metal from the alluvions where nature had deposited it, after having herself pulverised and ground the rocky mass in which it had been imprisoned. In California and Australia, but especially the former of these countries, the industry of man, armed with a powerful instrument, does not fear to attack the veins of quartz which conceal, in scattered grains, the precious metal. The alluvions themselves are worked with more intelligence and a better organisation of labour than heretofore. Companies, more or less powerful, have constructed or are constructing canals to bring the water required for washing the auriferous earth. A better division of labour has been established

among the mining population, and, in fine, the utensils and the processes of washing are greatly improved.

If it were necessary to sum up with the expression of an opinion on the future of Australia and California, I should say, that, even if it were admitted to be quite improbable that the production of the precious metal which has been maintained to our day should be permanent, or, to repeat the same thing in other words, that the average yield of a day's labour should be undiminished, it is difficult not to admit our belief that the mines of these two countries must, for yet a long series of years, produce gold in such quantities and on such conditions as to render a marked decline in its value inevitable. This is exactly as if we said that in all those countries where, as in England, gold is unquestionably the monetary standard, as well as in those where, as in France, it is left in possession of this attribute, there is ground for predicting a progressive rise in the price of articles of subsistence, and raw materials. The price of manufactures would rise in the same proportion, if the improvements in machinery, much more easily effected in manufacturing than in agricultural processes, did not partially or completely counteract this rising tendency.

In the preceding statement I have hardly alluded to the gold mines of Russia, the production of which has hitherto remained considerably below that of the mines of Australia and California, although in one year they have yielded 30,000 *kilogrammes*, or upwards of 100 millions of *francs* (£4,000,000). The two following facts, however, ought not to be lost sight of:—1st. The auriferous deposits of the Northern and Eastern regions of the Russian Empire are literally of a gigantic extent; from all the information we at present possess they would appear to be even the largest in the world. 2ndly. In richness—by which I mean the quantity of gold contained in a cubic *metre* of the sand or

gravel composing the beds of the auriferous alluvions—they are hardly surpassed by those of Australia and California.

The mines of Siberia have had this advantage, that eminent scientific men have made them the subject of their most serious study, having, for that purpose, personally visited those regions. At the request of the Emperor Nicholas, Baron Humboldt himself made in 1829, in company with some very distinguished *savans*, a long journey in the countries through which extend the chains of the Oural and Altai mountains, and from that time he has carefully collected and condensed all the information that has transpired respecting this quarter of the world; and hence sprung his work upon *Central Asia*, published in 1843. Towards this latter period an English geologist of deserved celebrity, Sir Roderick Murchison, explored a portion of the gold mines of Russia, the results of which he has published.*

For a series of years the Russian government has been careful to make Europe directly acquainted with all that passes in these auriferous regions. A special publication, which has been for some years suspended, *l'Annuaire des Mines de Russie*, contained periodically on this subject some reports and memoirs of very great interest. We thus know that the region occupied by the chain of the Oural, which is that to which for the first years the mining operations were confined, offered an immense field for the industry of man, for this chain is not less than 1,900 *kilometres* (about 1,200 miles) in length; but to the East of the Oural, in Siberia, the gold regions expand to prodigious dimensions. From the Kamschatka and the Ouskoi mountains, the foot of which is washed by the Pacific Ocean, as far as the

* The reader is referred to an address delivered to the Geographical Society of London, the 27th May, 1844, by Sir Roderick Murchison, then President of the Society.—(*Address to the Anniversary Meeting of the Royal Geographical Society.*)

meridian of Perm, to the West of the Oural, over a distance which embraces the half of a circle which would be described in making the circuit of the globe on those latitudes, the auriferous deposits are distributed in numerous groups and over a large surface, and the zone over which they are spread is of an average width of 900 *kilometres* (about 550 miles). Baron Humboldt has remarked that the presence of gold over this immense surface is one of the phenomena the most general to be found on the globe. Moreover, the richness of these auriferous alluvions is very decidedly superior to that of those found in the Oural.

With the new and improved spirit displayed by the Russian administration since the accession of the present Emperor, and with the more active impulse given to industry in this vast Empire, we may reasonably expect that the production of gold in Northern Russia will henceforth experience a large increase. The Emperor Nicholas, in 1849 (edict of the 14th-26th April), raised an obstacle to the development of the mining operations of Siberia. He subjected them to a progressive tax, which for the larger undertakings, those which returned upwards of 40 poods of metal (655 *kilogrammes*, or 2,170,000 *francs*, £86,800), amounted to 30 or 35 per cent on the gross produce, independent of the special tax for police purposes : for the great undertakings, this was 9 to 10 roubles (36 to 40 francs—30s. to 33s. 4d.) the pound of metal of the Mint standard. Such heavy charges could not fail to limit the extraction. Previously the State levied on private enterprise a tax of 15 per cent, independently of a rate for the police, and which was sufficiently heavy ; these regulations are still in force in the mining districts of the Oural.

This is not the place to inquire whether the government of the Emperor Nicholas had good reasons for increasing to this extent the amount of taxation imposed on the

miners of Siberia. At the period when the duty of from 30 to 35 per cent was established, there might have been good arguments to justify it. But with the competition which the mining operations of California and Australia offer to those of Siberia, these high duties cannot be sustained. It is the interest of Russia to bring her gold to market before the fall assumes a more decided character, for she will otherwise incur a loss by retarding the production of the metal.

It is not out of place here to allude to some contingencies which, in addition to the production of new gold, may cause an increased quantity to flow towards the Christian nations. There is one among others of which I may say that it is not altogether without probability ; I allude to the breaking down of the barrier of exclusiveness, which has hitherto completely shut out the nations of the West from the Empire of Japan. The tendency of events passing in the remote East, the direct steps that have been taken by the American and Russian squadrons with the Japanese government, and the treaties concluded in consequence of these visits, not only with Russia and the United States, but also with Holland, all presage for an early period the establishment of important relations between the Japanese Archipelago and the Christian world. Now, the information we already possess relative to Japan leaves no room to doubt that gold is there at a comparatively low price ; persons go so far as to say that the relation between gold and silver in Japan is hardly above that of 1 to 3. Such is, for instance, the statement in a letter dated the 6th July, 1857, addressed by the consul of the United States at Simoda, Mr. Townsend Harris, to his colleague at Hong Kong. He there very expressly states that the relation between gold and silver is only as 1 to 3½. The sole object of the letter is to bring the fact to the knowledge of the Americans who trade with China, in order that they may profit by it, so that, from this moment, they possess

the faculty of doing so. Can there be a doubt, then, that there will soon be an exportation of a large portion of the gold to be found in Japan? It is well, however, to add that the quantity of this gold is not known, and that probably it is not very considerable.

It is not irrelevant here to add that a Mexican province, which is supposed to conceal very rich mines of gold, comparable to the deposits of California itself, that of Sonora, appears destined to share the same fate as California, of which it is the neighbour, by falling into the hands of the United States. There are many indications which warrant the belief that this event is not distant. If it were to occur, and if, moreover, the mines of Sonora were to justify the reputation they have acquired with very enlightened travellers, whose testimony has been favourably quoted by Baron Humboldt himself,* we might expect a considerable force added to the effects produced by California and Australia; for the inhabitants of the United States would not display less energy and enterprise there than they have already exhibited in the valleys of the Sacramento and the San Joaquin.

Under circumstances similar to those which I have rapidly enumerated, the only way to prevent a fall in the value of gold and a consequent rise in the price of commodities, would be the discovery of a new demand equal in extent to the increased supply thrown upon the markets of the Western World. Thus only, the relation of supply and demand remaining the same, would people be able to procure the precious metal on the same conditions as at present, that is, they would be obliged to give in exchange the same quantity of corn or labour. Is the opening of such an outlet possible or probable? Let us investigate the subject.

* *Essay on New Spain*, Vol. II., p. 240. See also the Work of M. Saint Clair Duport,—*Production des Métaux Précieux au Mexique*, p. 202; and that of M. Duflot de Mofras,—*Exploration du Territoire de l'Oregon, des Californies, et de la mer vermeille pendant les années 1840, 1841, and 1842*. Volume I., p. 206 to 212.

SECTION IV.

ON THE NEW OUTLET THAT MAY BE EXPECTED FOR THE PRODUCTION OF THE NEW GOLD MINES, AND WHETHER IT WILL BE IN PROPOR- TION TO THE EXTENT OF THIS PRODUCTION.

WHAT are the additional purposes to which gold may be applied, and will they be sufficiently extensive to balance the increased production? And, first, as to the place it will find in the monetary system of the various countries where at present paper forms the principal instrument of exchange, and which are desirous of giving to their circulation the ballast of a greater quantity of metal, and particularly of gold. The United States and Austria are especially cited as being of this category. Turkey is also spoken of as a country where money of every kind is very rare. In the next place we are reminded of the necessity which exists in those countries sufficiently supplied with a metallic currency of calling in and restoring the coinage; that is, of replacing the portions of each coin which have been lost in circulating from hand to hand, and which, in the aggregate, amounts to a large sum; it is called the *wear and tear*. With reference

to all the countries where gold is used for money, we are told also that the quantity of coins in circulation must be augmented in proportion to the constantly increasing population, and to the progressive movement of commercial affairs throughout the civilised world. Then it is said that the growing luxury will call for the fabrication of a great quantity of jewellery, of plate, and gold lace; that to this must be added an increase in gilding, of which so much is in use, especially in Paris. Some other modes are cited, by which we are told a certain proportion of metal is to be absorbed; as, for instance, by hoarding and by shipwrecks.

Let us try to form an idea of the quantity of gold that may be required for all these different destinations. Let us inquire whether the outlets which they offer, naturally and without effort, to this precious metal, be likely to be such that a large floating mass of it will not remain upon the market; for if it be otherwise, if the various employments which have just been enumerated, should not be sufficient to absorb nearly the whole quantity of gold to be produced, and that, in spending it, almost on the same conditions as at present, that is to say, in exchanging it for nearly the same quantity of corn or labour, the consequence will be inevitable: gold, to find a market, will be obliged to submit to the law which governs all commodities in excess—to lower its price; in other words, the phenomenon of a rise in the price of raw materials, articles of subsistence, and merchandise, will infallibly present itself.

CHAPTER I.

OF THE OUTLET AFFORDED BY THOSE COUNTRIES WHICH AT
PRESENT HAVE EVIDENTLY AN INSUFFICIENT PROPORTION
OF METAL IN THEIR CURRENCIES.

It is true that the United States, after having adopted gold as their monetary standard, have more recently proposed to employ a considerable quantity of that metal, and which they have indeed coined ; but how much of it have they retained, and how much do they really require ? Gold, which in France is found extremely portable, because there the people had been accustomed to a silver currency, appears somewhat inconvenient to the inhabitants of the United States, in consequence of their having adopted the use of bank notes for the money required to be carried about their persons ; in that country the bank note supplies all the daily and current wants, it being issued for very small sums. In those States, where they are the most restricted, bank notes are in use for as small sums as five dollars (26 *francs*, or 20s. 10d.) In other States, and particularly in New York, they have dollar notes (4s. 2d.), and the notes of one State, when they are in good repute, circulate freely in others. It must also be remembered that, in the United States, private individuals have generally an account current at a bank, through which they make all kinds of payments, even down to the expenses of their households, which renders it unnecessary to retain at home any considerable sum, even in bank notes. Under these circumstances we may fairly assume that the currency of the United States would be sufficiently supplied with specie, if the circulation contained a *milliard* of *francs* (£40,000,000), independently of the silver coins

which are to a certain extent in use. I should say much less, but for the exigencies of the federal government, which, for several years, has adopted the absolute law of receiving nothing but specie in its treasuries, and which thus compels foreign merchants, as well as the purchasers of the public lands, to keep by them a considerable amount of gold currency.

As respects this estimate of a *milliard* (£40,000,000), as the amount of gold which would suffice for the United States, it must be borne in mind that for a long time this sum has been considered sufficient for England, whose population is equal to that of the United States, but where they have no bank notes of a lower denomination, excepting in Scotland,* than 125 *francs* (£5). In our day, it is not likely that the United Kingdom will require, under ordinary circumstances, much more than a *milliard* and a half of gold currency (£60,000,000). Moreover, where, as in England, in all payments below 125 *francs* (£5), specie is required, it is natural that gold should form a large part of the currency. But there can be very little occasion for gold, on the contrary, where, as in the United States, every payment of 26 *francs* (20s. 10d.), and frequently those of 5 *francs* (4s. 2d.) can be made in paper. It is silver that is required in countries where bank notes of so small a denomination are in use. Besides, at this very time, the United States ought to have been in possession of a *milliard* (£40,000,000), or more, of gold currency, if such a sum had been felt to be necessary. Since the discovery of California their mints have been in an almost unnatural state of activity, in comparison with past times. In the fifty years, from 1793 to the end of 1848, the year in which the Californian mines were discovered, their gold coinage amounted to only 81 millions of dollars (£16,200,000), or an annual average of 1,470,000 dollars

* In population, Scotland is only the tenth of the United Kingdom.

(£294,000). In the seven years, from the 1st January, 1850, to the 1st January, 1857,* their mints have coined 369 millions of dollars, or upwards of 1 *milliard*, 900 millions of *francs* (£76,000,000). It is at the rate of 53 millions of dollars, or 274 millions of *francs* (£10,960,000) per annum, for the average of the seven years, and of 56 millions of dollars, or 290 millions of *francs* (£11,600,000), for the average of the last six years. Since the 1st January, 1857, this rate of production will have certainly continued. Thus, to the present time, the emission of gold coins in the United States, since the discovery of the mines of California, must have reached nearly two *milliards* and a half (£100,000,000); and although that country may have exported a large portion of its gold, it probably retains at this moment all that it requires, and therefore it is not to North America that we must look for an outlet for the gold of the new mines. It may not, on this point, be superfluous to add that, probably, that country may have kept a part of the gold which it had coined prior to 1850, and which had attained, relatively, increased proportions during the later years. In 1847, the gold coined in the United States amounted to more than 20 millions of dollars, or 104 millions of *francs* (£4,160,000).

I come next to Austria. Let us suppose that the coins gold to the amount of half a *milliard* (£20,000,000); it is more than there is reason to expect from her, and for many reasons. In the first place it is not possible to see how the Austrian Empire could suddenly have need of such an extensive gold coinage. The country has hitherto had a silver rather than a gold currency. The pieces of silver 20 *kreutzers*, or 87 centimes (9d.), were the money most generally met with there, before the Empire fell under the regime of paper money, which, as is known, dates from 1848, and the

* *American Almanac* for 1858, p. 215.

greater part of those pieces, though withdrawn from circulation, are doubtless in the country. The metallic currency of this Empire presented these two characteristics ; it was scarce ; and it consisted principally of silver coins of a small denomination, because the Austrian public has been accustomed to the notes of the Bank of Vienna, which were issued for very small sums, even before they had a forced circulation. Notes of 10 *florins* or 26 *francs* (20s. 10d.), and of 5 *florins* or 13 *francs* (10s. 5d.) were in abundance. To this day, we have no reason to believe that the Austrian government, in its efforts to return to specie payments, which, unhappily, it has not yet accomplished (Spring, 1858), contemplates any change of system by which notes of a small denomination will be abolished. Now, when a people have bank notes of 13 *francs* (10s. 5d.), what occasion can they have for gold coins ? Besides, there is another decisive fact : in consequence of the new monetary system, recently adopted by Germany, Austria, in common with the rest of the Germanic Confederation, has placed herself in circumstances which will henceforth make gold play a secondary part in her circulation, even if, contrary to all probability, she were to renounce her bank notes of 26 *francs* (20s. 10d.), and 13 *francs* (10s. 5d.) In this system of currency, it is silver and not gold which serves for the pivot, and is the standard. The monetary unit is in silver ; and although it is true that, consistent with this fact, it might be possible, by means of certain contrivances, to secure for gold a considerable circulation, we do not see that any such contrivances have been adopted by the Germanic Confederation in general, or by Austria in particular, or that they have great chance of being adopted ; the tendencies seem rather in an opposite direction.

I am, therefore, going beyond the bounds of probability in admitting that the monetary system of Austria will, in the

course of a few years, offer to the new production of gold an outlet of half a *milliard* of francs, or 145,000 *kilogrammes* of gold (£20,000,000) ; but I desire to make the most liberal concessions to those who insist that it will be easy to find a market for the gold of the new mines.

As to Turkey, I find it impossible, however well disposed, to make her play a serious part in my calculations. Turkey has neither commerce nor credit ; the gold bullion which she can attract or keep is insignificant in comparison with the quantity of this metal produced, and we cannot assign the slightest weight to her in the present argument.

And, since we are taking into account those States which may absorb large quantities of gold, why not also include in our calculation those which may be induced to demonetise this metal ? This may not be a chimerical precaution, for the Dutch, who possess in the highest degree a practical sense, have almost taken this great step ; in Belgium, a country where business is understood, the same policy has been adopted.* The East India Company has pursued the same course throughout its vast dominions. Spain has so far made a beginning that she has withdrawn the attribute of money from foreign gold coins ; it is certainly possible that she may go further.

We must not lose sight of the fact that one of the reasons why the precious metals have, simultaneously, or separately, been invested with the functions of money, consists in the fact that they are generally more fixed in value than other commodities. The relative fixedness of value is one of the essential conditions for qualifying an object to serve as money, for if this fixedness did not exist, how could the money of which it was made serve as the measure of values ? From

* In Holland and Belgium, a gold currency continues to circulate, but purely and simply as merchandise, the daily value of which is regulated by commerce, and, consequently, it is very little used.

the moment that either of the two precious metals loses this attribute, or that it remains in suspense for a certain length of time, it is neither more nor less than the loss of the condition which qualifies it for the purposes of money. This is so well understood by persons versed in these matters, that, in England, where the fall in the value of gold is imminent, and even already in the course of realisation, able men have advised the abandonment of the gold standard, and the adoption of a standard of silver. According to these writers, gold ought henceforth to be demonetised in England. I shall have, by-and-bye, to cite a remarkable publication, where this opinion is sustained with much force. With much more reason, for a country like Spain, where the two metals, gold and silver, circulate simultaneously, without either being qualified positively as a standard in relation to the other, may such a measure be anticipated, or at least ranked among the number of possibilities ?

I think I may pass over in silence the outlets afforded by Asia and Africa. Everybody knows that in the Barbary Regencies, in the Levant, in China, and in the East generally, silver is the metal preferred. Silver, and not gold, is almost exclusively the metal exported from Europe to those countries. It is not that in some of the regions of distant Asia, in India, for example, gold is not appreciated and sought after ; but the local mines, and those of the islands of Sunda, particularly of the island of Borneo, which are important, are sufficient to supply their wants.

In fine, according to the preceding statement, if we seek to estimate the quantity of gold which may be in request for the next ten years to complete, or re-establish on a sound basis, the currency of States which notoriously require a metallic currency, or which, subjected to the regime of paper money, are prepared to make great sacrifices to escape from it, we arrive at no very considerable result. Austria, alone,

seems likely to receive a certain portion of the precious metal ; and it is on a very generous hypothesis that I have carried to 145,000 *kilogrammes* of gold (£20,000,000), the amount which may be absorbed, by the process indicated in the previous chapter, in that Empire. However, to remove all pretext for opposition, I will put at more than double, at 300,000 *kilogrammes* (£41,380,000), the total mass of gold which may during the next decennial period find a market in the Empire of Austria, and in the other States where a similar want prevails.

Here, then, is the first outlet of an extraordinary kind, which offers itself to the gold of California and Australia, as well as to that which we have reason to expect will be extracted from the mines of Northern Russia.

CHAPTER II.

OF THE INCREASE OF GOLD MONEY WHICH MAY ARISE FROM THE DEVELOPMENT OF BUSINESS, AND THE INCREASE OF POPULATION.—OF WEAR AND TEAR.—OF HOARDING.—OF SHIPWRECKS.

I COME to the second of the outlets which have been indicated, and which I have denominated above ; it relates to countries where the coinage is in a different state from that considered in the preceding chapter. According to those who maintain that there will be no excess of supply beyond the demand for this metal, and that consequently a fall in its value is not probable, it is not only in those countries where at present there is little or no specie in circulation, and where there is a desire to escape from the

regime of paper money, that a large outlet will be afforded to the new gold for monetary purposes. All civilised countries, those at least where gold is a legal tender, are to acquire a new supply, to be coined into money, for two reasons at least :—in the first place, the progress of commerce, and the constantly increasing number of transactions; and next the growth of population. Besides which, the coinage must be maintained, that is, the loss from wear and tear must be replaced.

On the first point, the multiplication of money which must take place in consequence of the extension of commerce, it may be well, in order to form a rational opinion on the subject, to take into account the contrivances by which great civilised communities modify the machinery of their exchanges, in proportion as commerce extends its operations and enlarges its sphere. Now, it may be shown that the progress of commercial institutions, such as credit establishments, for instance, with the intelligent employment of the substitutes which they put forth, the written contracts and instruments which they enable the public to keep in active use, allow of a very great increase of commercial transactions with only a small augmentation of the metallic basis to pay the balance of exchanges. The employment of bank notes, the transfer of sums from party to party in accounts current, letters of credit or drafts to order, of cheques such as are in use in England, the creation of establishments similar to the *Clearing House* of London, the judicious adoption of every possible contrivance for facilitating the transactions between house and house, city and city, state and state—all this tends to put limits to the extension of those metallic wheels which give motion to the machine by which commercial exchanges adjust themselves. This machine has undergone, and is undergoing continually, great improvements, almost as great as those of the steam engine.

Fifty years ago a steam engine of forty horse-power would have cost 100,000 *francs* (£4,000) ; in our day, in France, Farcot, Cavé, Cail, and a dozen others, will produce one at 25,000 (£1,000). It is the same in other countries. This arises from the great improvements made in the steam engine during the half century ; it is lighter than heretofore, contains less cast or wrought iron, and yet it is as strong and safe as before, if not more so. It is the same with the instrument of exchanges. Formerly it called into requisition a large quantity of metal, gold or silver. Now, for the same extent of business, a much smaller quantity suffices. How is this ? Because by a number of ingenious contrivances, like those in existence in England, and which France and other countries are not slow in imitating, the greater part of the operations of commerce are conducted without the intervention of a single crown-piece, or, at least, without calling into requisition any metallic money excepting as a matter of account. Letters of credit, bills, cheques, and other instruments of the same kind, are multiplied in proportion to the extension of commerce, but the specie required for these transactions experiences hardly any increase.

It is well to give prominence to the fact of the nearly stationary character of the metallic currency in countries where the commercial machinery is well organised. Bank notes are, it is known, another species of coin, not metallic it is true, but serving for a direct substitute to metallic money, which alone, however, constitutes money properly so called. It may be considered that they should expand or contract in the circulation, nearly the same as specie if it were alone in use, according to the necessities of commerce, inasmuch as the mass of these notes minister to the operations* of commerce.

* Independently of the operations of commerce, properly so called, the bank note is of use in many payments which may be called civil, as, for instance, the dividends of the public debt, and the salaries of public functionaries.

This is particularly the case where, as with the notes of the Bank of England, they are invested with the attribute of a legal tender. We know that in England, by virtue of this privilege, the debtor can pay his creditor in these notes, without the latter having the power of refusal, with this reserve, however, that at the same time the Bank of England shall redeem them on demand in specie. Under these conditions nearly all the reasons, drawn from the necessities of commerce, which call for an augmentation of the mass of gold coins in circulation, are also applicable to the bank note, and we are justified in arguing from the sovereign to the bank note, and reciprocally. Now, we know, in the most exact manner, the variations which in England the quantity of paper money necessary for her transactions undergoes; the official returns show periodically the amount of bank notes in circulation. A glance at these returns is sufficient to show that the sum total is almost stationary, in spite of the astonishing rapidity with which her commerce has increased. In ten years, from 1846 to 1856, for Great Britain alone, which is the great seat of the commerce of the United Kingdom, the circulation of bank notes has only increased £75,904 upon £30,925,123;* or an annual average of the insignificant

* In 1846, the average circulation of bank notes in Great Britain was £30,925,123, namely :—

Notes of the Bank of England	£20,786,500
Ditto other Banks of England and Wales	7,645,855
Ditto of Scotland	2,492,768
Total.....	£30,925,123

In 1856, this circulation was £31,001,027, namely :—

Notes of the Bank of England	£20,083,000
Ditto other Banks of England and Wales	6,756,872
Ditto of Scotland	4,161,155
Total.....	£31,001,027

sum of £7,590 only, or in the proportion of 1 to 4,000 ; a progression, so to speak, imperceptible alongside of that of its population, and especially of that of its commerce, as it is disclosed to us among other signs by the tables of importations and exportation.

If we confine ourselves to England and Wales, which comprise the most populous, the most industrial, and the richest portion of the United Kingdom, it will be found that from 1846 to 1856 the average circulation instead of increasing had diminished, and that even for the very considerable sum of £1,592,500.

Here is another fact illustrating to what an extent the improvement in commercial institutions permits an increase in transactions, without requiring an addition to the metallic currency, or even to the credit currency, that is to say, to bank notes. The *Clearing House* of London is, as its name indicates, an establishment to which every day the accounts of individuals, traders, and others come for liquidation, through the intermediation of their bankers. In 1839, this establishment had already attained such efficiency that for the annual liquidation of 950 millions sterling, or three millions daily, it only required, on an average each day, £200,000 in sovereigns, or rather in bank notes. At present with a mass of transactions amounting to 1,500 millions, or 2,000 millions sterling annually, instead of a proportionate addition to the £200,000 required for the daily balance being necessary, not a shilling is wanted : the *Clearing House* now dispenses completely with the use of bank notes. All is settled by the transfer of sums from one account to another in the books of the Bank of England.

This is the place to point out the increase that has taken place in the employment of bills of exchange, and to compare it with the stationary state of the amount of bank notes in circulation. An estimate, somewhat conjectural, but still

plausible, made by an English banker,* Mr. Leatham, taking for his point of departure the produce of the stamps on commercial bills, makes the mass of bills of exchange drawn in the United Kingdom in 1839 amount to 528 millions sterling. The augmentation was continual; from 1832 it was at the rate of 24 millions per annum. A more interesting fact probably is the amount of bills of exchange at one time in circulation, which it would seem, from the same calculations, amounted at a given date in 1839 to 132 millions sterling; according to this the average annual increase, since 1832, must have been more than 18 millions sterling.

The statistical accounts of Mr. William Newmarch, the able fellow-labourer of Mr. Thomas Tooke upon the two last volumes of the *History of Prices*, which appeared in 1857, give the total number of bills of exchange in circulation at a given moment, in the United Kingdom, in 1856, at about 180 millions sterling: or probably, as he adds, nearly 200 millions:† 200 millions of bills of exchange against less than 40 millions of bank notes, what more need be said to prove that in a country where the commercial institutions are in an advanced state, the currency of every kind, whether metallic or paper, fills in respect of quantity but a secondary part?‡

It is not denied that everywhere, in proportion as population increases, more money is required for transactions, other than those of commerce strictly so called, as for example those which take place in civil life, for retail purchases, for wages, and a thousand minor payments. This influence of the number of the population upon the amount of the

* The calculations of Mr. Leatham have received the explicit approval of Mr. Tooke, in his publication,—*An Inquiry into the Currency Principle*, p. 26.

† *History of Prices*, Vol. VI., p. 587.

‡ I refer to the *Principles of Political Economy* of Mr. J. S. Mill for an explanation concerning the diverse scope of the part which the different mechanisms of credit play with the same nominal power; Book III., Chap. IV.: and to the *Inquiry into the Currency Principle*, by the same author.

metallic currency, and particularly of gold, may be sensibly felt, especially in countries where, as in England, there are no bank notes for less than £5, or even of 100 *francs* (£4), as was the case in France until the law which was voted at the end of the session of 1857; but population augments everywhere slowly compared with the increase that has taken place in the production of gold. In Europe it varies in the different States from $\frac{1}{2}$ per cent per annum to $1\frac{1}{2}$ per cent.* In the United States, by a sole exception, it is 3 per cent if not more. Let us admit the average increase to be $1\frac{1}{2}$ per cent, which, for the whole, is an exaggeration. Now, what is the mass of gold currency to take for our starting point? It would be very difficult to estimate at more than 6 *milliards* (£240,000,000) the sum required for the circulation, independently of silver money, of all the nations of Christendom.† Now, $1\frac{1}{2}$ per cent on this sum amounts to 75 million francs, or 22,000 kilogrammes of gold (£3,000,000).

* In France, the increase of the population, as measured by the excess of births over the deaths, has only been on an average, during the triennial period from 1st January, 1851, to 31st December, 1853, at the rate of 152,738. To have been $\frac{1}{2}$ per cent, it ought to have exceeded 175,000. The three following years must be considered exceptional, for under various adverse influences they exhibit a decreasing population.

† The amount of money, whether gold or silver, which *circulated* in Europe thirty years ago, was estimated at less than 9 *milliards* (£360,000,000). Baron Humboldt quoted as probable, in 1827, the sum of 8,600 millions (£344,000,000). (*Essay on New Spain*, Vol. III., p. 469.) The amount must have since increased; but the employment of contrivances for dispensing with the use of money, through the instrumentality of institutions of credit, or for balancing commercial transactions, has increased in a still greater ratio, and must have largely dispensed with an increase in the amount of metallic money in proportion to the growth of commerce. If it is borne in mind that America has yielded almost constantly, until 1848, much more silver than gold, nearly in the proportion of 3 francs of the former against 1 franc of the latter, the assertion will appear probable that, taking into account the silver money possessed by Europe, and the Christian world generally, and the present improved mechanism for facilitating exchanges, the whole of Christendom would not have had occasion for a *circulation* of more than 6 *milliards* (£240,000,000) of gold currency, so long as gold should not have suffered any depreciation in value; it is making a great concession to admit so large a sum. I put the word *circulation* in italics, because I wish it to be understood that I do not mean to include that which has been concealed or hoarded from any cause whatever.

But here it will be said that we ought not to look merely at the growth of population, that the increase of general wealth, as well as the diffusion of comfort among the working-class, must also be taken into account. Again, it will be shown that the retail transactions, which can only be carried on with a metallic currency, are much more extended when people are in prosperous circumstances than when they are suffering from privations. It is true; but is it a gold currency that is wanted for this purpose? It is rather, as it appears to me, silver or copper money that is required for the daily purchases of the greater number of households. Gold is never coined into pieces of less than 5 *francs* (4s. 2d.), and even the success of these coins of 5 *francs*, which have lately issued from the French Mint, remains very doubtful, notwithstanding the pains that have been taken, by giving them the largest surface possible, to prevent their slipping between the fingers: and still the piece of 5 *francs* is a large sum for transactions of this kind.

It may here be remarked that the introduction of the bank note of 50 *francs* (£2) into the circulation of France, which has just been authorised by law, will be calculated considerably to diminish the proportion of gold employed in the currency. This restrictive effort will, in France at least, be a counterpoise to the expansive force which may be imparted to the circulation of gold. It may be said, it is true, that the Bank of France, which has not shown an excess of zeal in giving to the note of 100 *francs* (£4) all the circulation to which this representative sign might pretend, is far more likely to delay indefinitely the issuing of the note of 50 *francs* (£2). Nevertheless, the Bank's aversion to novelties has its limits, and its ears are not shut to the voice of reason. In the same way as latterly it has consented to distribute the 100 *franc* note with a less niggardly hand, it

will yield to the demand of the public, if a somewhat strong opinion be pronounced in favour of the note of 50 *francs*.

By the entire of these considerations, I should perhaps be warranted if I made no addition, on account of the extension of business, to the 22,000 *kilogrammes* of gold (£3,000,000), which have been indicated above as sufficient to supply the wants of an increased population,—an addition which has been amply sufficient. However, to place my calculations beyond all possible objection, I will double the sum of 22,000 *kilogrammes*, which will raise to 44,000 (£6,000,000), the extension which will annually be occasioned in the gold currency, as well by the augmentation of business, as by the growth of population. I cannot, however, withhold the remark that I think I have been extremely liberal: 44,000 *kilogrammes* is more than double the mass of gold which Europe received from 1800 to 1825, for every kind of use.

Let us now inquire into the consumption of gold by the abrasion of money in passing from hand to hand. It amounts in a great State to a very appreciable quantity of metal every year. On this subject some facts of a varied character have been furnished by observation and experiment, the most remarkable being those which have been made at different times in England, but especially in 1798, by a celebrated chemist, Hatchett, and a distinguished physician, Cavendish; and, more recently, in France, by Messrs. Dumas and De Colmont, in the name of the Commission on Coins, of which Thénard was president; and quite lately in Holland, on the occasion of the change made in the currency of that country. It has thus been proved that, taking coins of equal dimensions, those pieces which contain a slight alloy of copper, and especially of silver, suffer much less from usage than those made entirely of silver. It has also been found that, in proportion as we descend to coins of a smaller denomination, the wear

increases, even rapidly, perhaps because they pass more frequently than others from hand to hand, or because they present a larger surface in proportion to their weight. There is reason to believe that, in adopting the proportion of 2 to 1,000, or of 1 to 500, we shall greatly exaggerate the annual loss by the wear of a gold currency. At this rate, upon the 6 milliards of *francs* (£240,000,000), which would more than suffice to saturate with gold the whole circulation of Europe, and the other States of Christendom, there would be a yearly loss of 12 millions of *francs*, or, in round numbers, of 3,500 *kilogrammes** of metal (£480,000).

Taking into account the whole of the employments to the examination of which this chapter has been devoted, and

* The facts which we possess, as to the wear of a metallic coinage, are much less precise respecting gold than silver, and even as regards the latter they do not always agree very well. With respect to silver, it has been proved that the French five-franc piece, the weight of which is 25 *grammes*, loses only four *milligrammes* per annum; that is 16 parts in 100,000, or 1 in 6,250. In England, according to the experiments of Cavendish and Hatchett, quoted by Mr. Jacob, the loss was, upon the five-shilling piece, 18 in the 100,000, or 1 in 5,555; and on the shilling, which had a much more rapid circulation, 1 in 219. Returns on a much larger scale have been furnished from Holland, obtained a few years ago during the general recoinage of her silver money, and they have been justified in a work which was, by the order of the government, published on the occasion of that vast operation, by M. Vrolic, the president of the Commission on the Coinage of the Low Countries, and subsequently minister of finance. It appears that the wear of silver coins, of a small denomination, is much less in Holland than has been estimated by Mr. Jacob for England. Mr. Jacob concludes, from the experiments made at the Mint of London, in 1826, that gold coins lose annually 1 part in 800. The experiments of 1807, according to the quotation given by the same author, would indicate a loss of 1 in 1,050 on guineas, and of 1 in 160 on half-guineas. If, then, we bear in mind that the guineas, or more properly speaking the sovereigns, form the principal part of the gold coins in circulation in England, the average annual wear will be about 1 in 950. In France, where the prevailing gold coin seems destined always to be the 20-franc piece (16s. 8d.), which does not differ considerably in volume or circumference from the English sovereign, but where the silver contained in the ingots, which would add to the hardness of the money, is more carefully extracted before it is coined than in England, the proportion of loss is a little greater; but there is good ground for concluding that it is less than 2 in 1,000, or 200 in 100,000. When we compare 20-*franc* pieces of a rather old date, but which have not been "sweated," with five-franc pieces of the same date, they appear less worn. Now, the latter, as has been shown, lose only 1 in 6,250.

calculating them with a liberality which must be admitted to be excessive, we arrive at an annual consumption of 47,500 *kilogrammes* (£6,650,000) of gold ; for ten years this would be 475,000 *kilogrammes* (£66,500,000).

There is yet another possible means for the consumption of gold to be noticed, I allude to the practice of hoarding. To hoard, that is to hide money in secret places, is a habit belonging to an uncivilised state of society, where riches take refuge underground to escape spoliation, or in which loans on interest are hardly known, either from their being condemned by prejudice, or from the fear that money once parted with would be given up to rash adventures. It is a habit which for a long time not merely withdrew large sums from circulation, but actually occasioned their loss ; because, in the midst of revolutions, invasions, and other public calamities, their place of concealment was forgotten ; the secret was lost by the death or exile of its possessor. But in the Europe of our day, the quantity of the precious metals which issue from their hiding-places is, in all likelihood, greater than that which seeks refuge there. The practice, therefore, of hoarding can scarcely be any longer cited as occasioning a void in the circulation which the mines will have to fill up. However, to avoid absolutely the charge of not having taken sufficient account of all the possible outlets for the metal extracted from the new gold mines, I will suppose that 50 millions (£2,000,000) are abstracted from the circulation by this process ; but then it will not be taken amiss if I include in this the quantity of gold which may be lost by a variety of accidents, and particularly through shipwrecks.

There is also a particular outlet, of a transient character, for gold money in certain States, such as France ; I mean that portion of the circulation which is carried on the person. Until recently, when silver money circulated almost exclu-

sively in France, people used but very small sums for pocket money: it was really burdensome to find 25 or 30 *francs* in one's pocket. But since gold has taken the place of silver, a person who unwillingly found on himself four or five 5-franc pieces, carries in his purse at least four or five pieces of 20 *francs*, or an equal sum in smaller coins. There is no doubt that, for the mass of society in France, the quantity of gold thus carried about the person amounts to a very considerable sum. Nevertheless, it would be probably sufficient to assume that there are a million of persons who, on an average, thus permanently charge themselves with 100 francs each. Let us, however, say double the amount, which will give us 200 millions of *francs* (£8,000,000). But France is almost the only country where this condition of things applies, for it could only occur in a State where, before the discovery of the new mines, silver was the current money, and where, owing to legislative provisions, gold could be substituted for a silver currency,—and such countries are very few in number. There are many more communities where, in the same period, gold has been reduced to a subsidiary rank, or even banished from the circulation altogether. Let us, however, double the above sum of 200 millions (£8,000,000), in order to meet the case of similar phenomena which may have occurred elsewhere, and we shall then have 400 millions of gold (£16,000,000). But it must be remarked that the fact in question does not remain to be accomplished, that the operation has already been carried out wherever it is likely to be effected; that it is not, therefore, an employment offered to gold for the future; that it is only an outlet which has absorbed a fraction of the large quantity of gold which, in addition to the old production, has been already yielded by the new mines.

CHAPTER III.

ON THE EMPLOYMENT WHICH HABITS OF LUXURY MAY OFFER
TO THE GOLD OF THE NEW MINES.

WHAT are the outlets which may be created by the constantly increasing developments of luxury? On this subject we must avoid falling into a delusion: the age is less pompous than it is supposed to be, or rather it does not exhibit its pomp by a display of gold ornaments. It loves gilding, and judging from what is seen in Paris, this species of display is extending in rooms, on furniture, wainscots, and ceilings; but, as respects jewellery, what is now made is very light. Many gold rings are manufactured, as well as gold watch-cases, but very few articles are now made which consume a considerable weight of that metal. This may be verified by referring to the returns of those establishments which, in France, are called *bureaux de garantie*.

Who would not suppose that in Great Britain, where a wealthy aristocracy spends its riches freely, and where, since the peace of 1815, commercial fortunes have increased and multiplied to a surprising extent, the manufacture of articles of gold must have undergone a considerable augmentation? The contrary, however, is the fact. I have before me the return of the duty paid on gold plate in England, from the commencement of the century to 1850 inclusive, which appears in Mr. Porter's excellent work the *Progress of the Nation*. According to this table the progress of the manufacture of articles of gold remains, incredible as it may appear, behind that of the population. From the first quinquennial period of the century to that which closed in 1850, the increase in the quantity of gold which paid duty was 50

per cent ; during the same time the increase of population was much greater ; it doubled. Then, if we take into account the quantity of gold required for this manufacture, we are amazed at its smallness. It is an atom in comparison with the total production. During the last quinquennial period of the half-century, the annual average has only been 7,636 ounces. Independently of these statistics of Mr. Porter, I have been enabled to procure the returns for two recent years (1855 and 1856). The average is 10,420 ounces, including that which is destined for exportation. It must be stated that many articles, such as watch-cases, are excluded from this return ; but let the amount be doubled or trebled, let it be quadrupled, quintupled, or even more, and still how little will it amount to in comparison with the present production of gold ?

From England let us pass to France. Here also may be observed a movement slower than the progress of the population ; if we embrace also an interval of half a century, in which, it is true, is comprised all the period of the Revolution. Necker, who must have been well informed, estimated in 1789, the jewellery manufactured in France, both gold and silver, at 20 millions (£800,000) ; in 1821, it was only 21,750,000 francs (£870,000), which drew from Baron Humboldt the remark that,—“The tables published by the Count de Chabrol would prove, if the estimates of M. Necker are correct, that the state of the manufacture of jewellery has not greatly altered.”* Baron Humboldt might have added that, since for the two metals together the alteration had been insignificant, whilst there had been a considerable increase in the use of silver plate, it necessarily followed that there must have been a diminished employment of gold.

* *Essay on New Spain*, edition of 1827, Vol. III., p. 467.

Since 1821 a certain progress is observable in France. According to the *bureaux de garantie*, the average of the years 1822-3-4 gives 3,059 *kilogrammes* (108,065 oz.) for gold; and the average of the two years ending 1st Jan., 1857, is 8,185 (289,205 oz.); but from these quantities a portion must be deducted, as will be seen, on account of the old metal and jewellery returned to the crucible. There are, then, grounds for saying, both of France and England, that an outlet so limited, and augmenting so gradually, could not tend seriously to raise the consumption of gold to the level of its greatly increased production.

In 1827, Baron Humboldt estimated the quantity of gold employed in all Europe, by the goldsmiths and jewellers, at 9,200 *kilogrammes* (325,100 ounces); but from this must be deducted the old gold which Necker estimated at the half, but which others, with no better opportunities of being well informed, put down at much less. Let us carry to double this amount the gold at present worked up by these industries, and make no deduction for the metal derived from the remelting of old jewellery and ornaments; this will, if we admit Necker's hypothesis of the proportion of old gold entering into the composition of the new, quadruple the effective consumption of gold in 1827. Here, then, is an outlet for 18,400 *kilogrammes* (650,200 ounces) of the production of the mines. To take a liberal view, let us put down 25,000 *kilogrammes* (875,000 ounces) for the ensuing ten years, as the consumption for the same purposes in the civilised States of North and South America. It is a very high estimate, for this amount, set apart for the goldsmiths and jewellers, is exclusive of the gold required for lace and gilding, with which I shall have to deal in the present chapter, and for which an ample allowance will be made. It may thus be seen how far the demand for jewellery and

ornaments can counterbalance the excessive supply of this metal in the market; it is very far from being sufficient for the purpose.

But, it will be said, the world has absorbed the mass of nearly 40 *milliards* (1,600 millions sterling) of gold and silver which has been supplied by America since the time of Columbus. True enough, but on what condition? On condition that the value of silver fell in the proportion of 6 to 1, and that of gold in the proportion of 4 to 1. And it is only by a similar process (though I do not pretend to assign the proportion) that the large supplies which are now being produced by the new mines will find an outlet. The present essay is written to prove, not that this extraordinary production of the precious metal cannot be employed on any terms, which would be absurd, but simply that it cannot be absorbed and maintain its present value in relation to other commodities: mankind is not rich enough, nor will it soon be, to pay so dearly for so large a mass. To find an outlet, it is absolutely requisite that so vast a production should be accompanied with a great reduction in value.

But not to anticipate the conclusion, let us pursue the enumeration of the extraordinary channels which may be opened to absorb the extraordinary supply from Australia and California; and, first, let us, by way of finishing the account with luxury, allude to gold lace and gilding. Paris gilds itself not a little, and is surprisingly addicted to gold lace. Is there not in these two employments a consumption large enough to enable the producers of gold to dispose of their precious commodity, almost indefinitely, without any reduction in value? In order to reply to this question, let us calculate the quantity of metal which is required to gild a given surface. Gold, as is known, is the most malleable of metals; it is so to a degree of which it would be difficult without ocular illustration to form an idea. The goldbeater

makes it into leaves, which, thanks to the progress of his art, are now so thin that fourteen thousand form only the thickness of a *millimetre*, and, consequently, 14 millions of leaves laid one upon another would make a thickness of only a *metre* (about 39 inches). A cubic *metre* of solid gold, which in truth would not weigh less than 19,258 *kilogrammes* (680,440 ounces), would suffice to gild a surface of 1,400 *hectares* (about 3,450 acres), and 1,000 *kilogrammes* (35,300 ounces) would cover 720,000 square *metres*, or 72 *hectares*, with gold (about 179 acres). It is a result which quite confounds the imagination. And yet the metal used in the manufacture of gold lace is spread over a much larger surface. The substance of the threads of which this lace is made consists of silver, the surface alone being of gold, and one *gramme* of gold, worth 3 *francs*, 44 *centimes* (2s. 10d.) suffices to gild a thread 200 *kilometres* in length (120 miles). In a piece of 20 *francs* (16s. 8d.), there is gold enough to cover a thread which would extend from Calais to Marseilles.

I might also remark that in the calculation of the quantity of gold leaf to be made from a cubic *metre*, or 1,000 *kilogrammes* of gold, I have spoken as though the gold employed was of an absolute fineness, which is not quite correct. Experience shows that the malleability of gold is increased by a slight mixture of alloy, and which diminishes proportionably the consumption of the precious metal. It is true that this proportion is not great, it is about 4 per cent, and we must make a corresponding abatement from our estimate.

Let us now suppose that a room, suitably gilded, consumes five square *metres* (a *metre* is 39 inches) of gold leaf, which is I believe sufficient. At this rate 1,000 *kilogrammes* (35,300 ounces) would gild one hundred and forty-four thousand saloons or apartments, that is to say, at least twenty times the number which are thus embellished in one year in all those cities where the houses are of a character to require

their interiors to be gilded. With the remainder what a multitude of picture-frames, books, kettle-drums, cloths, epaulettes, and all kinds of objects might be clothed in a dazzling covering of gold ! Let the number of gold leaves required for each apartment be multiplied, let the number of books and picture-frames be augmented, and still we shall arrive at no result which deserves a moment's consideration. At Paris, where nearly all the gold leaf is beaten which is consumed in France, and a part of Europe, the quantity of gold operated upon does not exceed 1,150 to 1,200 *kilogrammes* (40,650 to 42,400 ounces). I give this fact upon the authority of a man of high integrity who was at the head of this industry, and was well versed in its statistics.*

The fluid process of gilding, that is by means of a solution of a salt of gold in water, consumes but very little metal ; so that a very moderate number of kilogrammes of gold are sufficient for the thread required by all the lace manufactories of Paris and Lyons.

In fine, for all descriptions of gilding, as well as for every kind of gold lace, we shall exceed the truth in putting down at 10,000 *kilogrammes* (353,330 ounces), the quantity of gold which may be required annually for the next ten years. I am always arguing on the assumption that the metal does not fall in value ; for, let it be reiterated, if a considerable depreciation should occur, it will be followed in the case of gold, as it would be in that of any other article under similar circumstances, by its extended use, and its increased consumption. It is probable that, at the present moment, 5,000 *kilogrammes* (176,665 ounces) is more than the amount consumed. If we add to the quantity, hypothetically admitted, of 10,000 *kilogrammes*, the amount already computed, in the same spirit of liberality, for ornaments and

* The late M. Favrel, one of the most eminent men of business in Paris.

jewellery, we shall reach an annual consumption of 35,000 *kilogrammes* (1,236,655 ounces), for the different arts which minister to the various forms of luxury. Here, then, is the limited employment which luxury, in all its bearings, offers to the gold furnished by the new mines. It is a real deception to the statistician, who might have expected to find a limitless outlet. Let us not, however, omit to mention one rather insignificant mode of consumption. The display of gold in utensils, more or less massive, is the luxury of the less refined part of the community, whose eye is instinctively attracted by the glare of a dazzling metal, and whose desire is excited for an object to which there is vulgarly attached the idea of great riches. It is a species of magnificence which was reserved for the sovereigns of primitive nations ; it constituted the splendour of the Incas, and that of Attila, and of Genseric ; it was the pride of the savage races whom the Europeans discovered in America : these poor natives carried lumps of gold suspended from their noses and ears. But our intelligent communities, with their cultivated minds, decorate their apartments with stuffs tastefully arranged, and which present to the eye patterns of elegant form, and brilliantly or delicately coloured. They adorn them with works of art, with sculpture of every kind, and pictures of the various schools, and exquisite engravings. This is a more enlightened luxury, and more suited to an advanced civilisation.

Not that I would here maintain the opinion that, in a fit of ideal refinement, civilised nations will henceforth despise the glitter of gold ; I merely mean to say that the observation of what is passing every day under our eyes, warrants the belief that luxury is seeking its gratification in other directions. In such an undertaking, as devoting a large sum to the purchase of an object for embellishing a residence, people generally prefer something which has

other recommendations than the weight it contains of so valuable a commodity as gold. The man of little taste may be flattered by the possession of some grand vase of a material which is worth sixteen hundred times its weight in copper, ten or fifteen thousand times its weight in iron, thirteen thousand times its weight in wheat ; but this price is so excessively high, that persons with any taste for the beautiful, however rich they may be, pause, and turn aside. Nevertheless, gold has lost none of its incomparable splendour, and if it were to fall considerably in price, it is probable that then, and only then, it would become, to some extent, the fashion, on condition that the merit of the form equalled the beauty of the material.

CHAPTER IV.

CONCLUSION OF THE PRECEDING CHAPTERS.—THE FALL OF GOLD VERY PROBABLE, IF NOT INEVITABLE, IN RELATION TO ALL OTHER COMMODITIES.

It is not difficult to draw a conclusion from the preceding analysis. In no direction can a new outlet be seen sufficiently large to absorb the extraordinary production of gold, which we are now witnessing, so as to prevent a fall in its value. There is but one way of disposing of these masses of gold ; it is by coining them and forcing them into the current of circulation into countries which are already sufficiently provided with a gold currency. This current will absorb them, for it is, so to speak, insatiable ; it receives and carries off all that is thrown into it ; but the process of

absorption and assimilation is on one condition, namely, that gold diminishes in value, so that in those transactions where heretofore ten pieces of gold had for example sufficed, eleven, twelve, fifteen, or even more, will be henceforth required. In a word, if gold is to enter into the circulation in indefinite quantities, it is by being subjected to the rigorous law of a continually increasing depreciation.

And here is exhibited a disadvantage under which gold suffers in comparison with silver. The latter metal has, besides being used for money, other somewhat extensive employments. The requisites of the table, such as dishes, plates, spoons, forks, &c., silver kettle-drums, and church ornaments, consume a large quantity. Silver plating, so much on the increase for some years, will, doubtless, take off a considerable amount; we are probably only in the infancy of this interesting industry, and the consumption of metal to which it gives rise is small in comparison with what may be expected for the future. Gold has, doubtless, its employments in the arts, and perhaps, ere long, gilding may become as general as plating; but to gild properly a given surface requires much less gold than it would of silver to cover it with the latter metal; in this manner, the peculiar attribute of gold, of being infinitely malleable, or of holding together in layers infinitely thin, only tends to diminish its employment. Thus not less than 6 *grammes* of silver (92 grains, troy) are put upon a *couvert*, in the manufacture of the house of Cristofle; whereas the gilding needed for covering utensils, picture-frames, or even ceilings, requires but the merest atoms of gold.

I have explained the consumption for gilding rooms, picture-frames, and gold lace; I have also included articles of jewellery made in imitation of gold, by dipping them rapidly in a solution containing a portion of nitrate of gold. The strongest gilding given in M. Cristofle's establishment con-

sumes $7\frac{2}{10}$ grammes (107 grains, troy) on a dozen dessert *couverts*; whilst for silver, with *couverts*, it is true, of a larger size, it is 72 grammes (1,104 grains, troy); but there are summary processes of gilding which do not consume more than one-tenth of this proportion of metal. From the particulars obligingly communicated to me by M. Cristofle, it appears that his establishment for gilding and plating consumed, in 1856, 4,022 *kilogrammes* (142,110 ounces) of silver, and only 17 *kilogrammes* (601 ounces) of gold. In no one year has this house, whose business is considerable, consumed, in gilding, more than 27 *kilogrammes* (954 ounces) of the latter metal. M. Cristofle estimates that the gilding of metals consumes, for all that is done in France, only 400 or 450 *kilogrammes* (14,130 or 15,900 ounces) of gold yearly. Now, France is a producer of these articles, not only for her own use, but for exportation.

To fix these ideas, and give precision to our deductions, let us now recapitulate the various employments for gold which we have just designated, representing them in figures.

It has been said that the currencies of those States which are short of gold are not likely to require for the next ten years more than 300,000 *kilogrammes* of this metal (£42,000,000). To arrive at this result, it has been necessary to resort to very forced anticipations. As for the increase of money rendered necessary by the additional population, and the extension of well-being among the people of Europe and America, I have made a large estimate in calculating it at 22,000 *kilogrammes* (£3,080,000) a year, or 220,000 *kilogrammes* (£30,800,000) for the ten years.

In order to satisfy the most exacting, I have estimated at an equal amount, 220,000 *kilogrammes* (£30,800,000), the addition which, in ten years, ought to be made to the currency to keep pace with the extension of commercial operations, strictly so called.

For wear and tear, it has been shown that we run no risk of valuing it too low in putting it down at 3,500 *kilogrammes* (£490,000), or, in ten years, at 35,000 (£4,900,000). And, then, for hoarding, with the addition of accidental losses, there has been more than an ample allowance made in the estimate of 15,000 *kilogrammes* yearly (£2,100,000), or 150,000 in ten years (£21,000,000).

It is an exaggeration, beyond allowable bounds, to put down the quantity of new gold required by jewellers, also for the various modes of gilding, and for gold lace, at an average for the next ten years of 35,000 *kilogrammes* (£4,900,000), or, for the decennial period, at 350,000 *kilogrammes* (£49,000,000).

We thus arrive, exaggerating everything, at a total of 1,275,000 *kilogrammes* (£178,500,000), as the mass of the precious metal which may find a natural employment during the next ten years. By the words *natural employment*, I mean that it should be absorbed on the same conditions as heretofore, and consequently without being aided by a fall in the value of gold. In estimating the average annual production, for the period of ten years, now commencing, at 250,000 *kilogrammes* only (£35,000,000); and it may be fairly expected to reach 300,000 (£42,000,000), the floating mass which would remain, and the weight of which would at the end of the decennial period operate to depress the value of gold, would amount to 1,225,000 *kilogrammes* (£171,500,000), that is to say to nearly the half of all the gold that America has furnished from the first voyage of Columbus to the discovery of the mines of California in 1848, a period of three hundred and fifty-six years.

Let 200,000 or 300,000 *kilogrammes* more (£28,000,000 or £42,000,000) be subtracted, to provide in the most ample manner against all contingencies, even the most improbable,

and still an enormous mass will remain to exert on the market a pressure beyond all precedent. To express in other words the same idea, in proportion as the gold shall be extracted from the new mines, all which shall not have been absorbed by the industrial arts will enter into the currencies of all those countries which will admit it in that capacity, and in each of them it will diffuse itself, all other things being equal, in proportions measured by the facilities which legislation may offer it. But in these countries it will be in great excess, relatively, of all that could have been required for the medium of exchange, if the metal had preserved its full value; that is to say, gold will circulate there on precisely the conditions which would be indicated if we had to demonstrate the process necessary for determining infallibly its fall.

It may not be out of place to add that the new mines have already yielded a considerable quantity of new gold, hardly to be valued at less than 1,200,000 *kilogrammes* (£168,000,000); so that the circulation, in all those countries where this metal is admitted as an essential element of the monetary system, is already saturated. This is perceptible enough where business is in its normal state, and not under the influence of those crises which give rise to an extraordinary want of all the instruments of commercial liquidation, and when it seems as if it were impossible to have enough of the precious metals. As soon as affairs resume their natural course, we see, in those countries just mentioned, gold flowing into the banks, and into the great establishments of credit and deposit. It cannot, therefore, now be justly said that there are great voids to fill up in the monetary mechanism of the principal States, and that thus the production of new gold is a welcome event. There are, on the contrary, grounds for preoccupying ourselves with the indications, already apparent, of a state of plethora.

Unless, then, we possess a very robust faith in the immobility of human affairs, we must regard the fall in the value of gold as an event for which we should prepare without loss of time. And who can be ignorant that the value of gold in relation to productions generally, and in relation to silver in particular, instead of being fixed, has experienced very numerous variations—that it has been undergoing modifications, sometimes in one sense, sometimes in another, from the beginning of the world, under the influence of forces far less energetic than those which are in action in our day? I refer those who desire information on this subject to a work, where an illustrious authority, Baron Humboldt, has treated it with the superiority which distinguishes him, shedding upon the question some of that vivid light which he carries everywhere with him. There will be seen, for example, that in throwing into the circulation of the Roman world a mass of gold very important, it is true, Julius Cæsar occasioned for that metal a fall so great that some time after it had been worth seventeen times its weight in silver it fell to be only worth nine times.* If the value of gold has varied every time that new circumstances have modified the relation between the supply and demand, and if it has risen or fallen in proportion to the change which manifested itself in this relation, by what strange witchcraft are the natural causes of the fall of gold to be

* This work of the patriarch of the sciences of observation is anterior, by several years, to the discovery of the mines of California; it dates from 1838. The *Journal des Economistes*, numbers for April and May, 1848, give a good translation of it, by M. Michel Rempp. Upon the same subject of the numerous variations that the value of gold has undergone in relation to silver, I could cite a great number of other works: I will mention, for example, the treatise of Lord Liverpool, for England; the *Traité des Monnaies*, of Leblanc; the work of Mr. Jacob, of which I have here made frequent use; and also the memoirs of M. Charles Lenormant, my learned colleague of the Institute, and of his son M. Francois Lenormant. I have already referred above to the *Traité d'Economie Politique* of M. Roscher.

paralysed, now that they are displaying themselves in such unusual proportions ?

Independently of all detailed calculation like the preceding, there is a general way of convincing oneself of the impending fall of gold, at least if some cause, at present impossible to foresee, should not suddenly put an end to its extraordinary production. The metal which is now being extracted in such abundance, in comparison with the past, must, if converted into money, affect its value by its mass. To prevent it from rushing into the currency, the demand for luxury must find it a sufficient outlet ; but is this possible ? There has been no scarcity of gold in the market since the working of the mines of Northern Russia. The chief part of that which has been yielded by Australia and California has, therefore, constituted a real surplus ; now, how can the developments of luxury absorb it ? A few of our newly enriched men, who, because existence is suddenly transformed for them, suppose that everything on the face of the earth is changed for the better, may well imagine that pomp and luxury will offer to the metal which issues from the mines a limitless outlet : but anyone who reflects, observes, and calculates, will form a different opinion. No, mankind is not in a condition to spare from the fruits of its labour the larger portion which it would be necessary to hand over to the producers of gold, to avert a fall in the value of their metal, for mankind is still poor, even in the most civilised countries. To pretend that, to satisfy its taste for pomp and display, it will continue to take, at its old price, all the gold of the new mines, is as if one were to say that mankind is suddenly become sufficiently rich to devote 4 or 500 millions (16 to £20,000,000), if not more, to the acquisition of a supplement of articles of luxury, and of that very kind, too, which most deserves the name of superfluities ;—4 or 500 millions, seeing that at the price which gold has maintained, almost

intact up to the present time, the quantity of this metal annually thrown upon the general market, approaches, in round numbers, a *milliard* (£40,000,000), and that the employments which may be reasonably foreseen will not, perhaps, consume the half of it. The civilised world, far from being able to indulge in such caprices, has all sorts of pressing necessities to provide for, and with which it is more seriously preoccupied. People are still badly fed, badly clothed, badly lodged, and badly supplied with all those objects which minister to the intelligent wants and the purer satisfactions of an elevated humanity,—satisfactions which, whatever may be said, are every day more and more appreciated. Even among the easy classes, how many wants are there, to satisfy which will claim precedence of the taste for arraying themselves in the splendour of gold? The currency, then, offers the one sole channel by which the principal part of this enormous production of gold can find an outlet. Already, several nations have closed the door against it. How then can it fail to encumber the channels of circulation in those countries which remain faithful to a gold currency? In other words, how shall we escape a general dearth of commodities in France, if we maintain for gold, in our monetary system, the place which in fact it now occupies?

SECTION V.

CHAPTERS I. TO V.

ON THE PART ASSIGNED TO GOLD IN THE MONETARY LEGISLATION OF FRANCE.

THIS section is devoted to an inquiry into the origin of the monetary laws of France, with a view to determine whether its legislators contemplated the existence of the double standard which is now causing a substitution of gold for silver in the currency of that country. The question is of the utmost importance to the French reader, and its solution is probably the main object which the author has had in view ; but as England stands in a totally different position, having a well-defined gold standard and legal tender, with an expressed legal demonetisation of silver for sums above forty shillings, the argument has no practical bearing upon the interests of this country, and I have obtained M. Chevalier's consent to omit the detailed translation of this section. I refer, therefore, to the original work for an able, elaborate, and, as I think, conclusive argument, showing that all the leading statesmen who took a part in framing the existing monetary law of France, agreed in the propriety of having one standard, of selecting silver for that purpose, and of

making the *franc* the monetary unit, and that it has been only by the unforeseen and unexpected increase of gold, owing to the new discoveries, that the obvious and avowed intentions of the French legislators have been defeated.

The author relies especially on the Report of the Minister of Finance, Gaudin, to the Consular Government, which led to the Act of the 7th *Germinal*, year 11 (28th March, 1803), and which definitively constituted the present monetary system of France. He gives the following extract :—
 “Whoever lends 200 *francs* shall never at any future time be repaid with less than one kilogramme of silver, which shall always be worth 200 francs, and shall never be worth more or less.”

The conclusion to which our author comes, after an elaborate appeal to facts and official documents, is that “the creditor of the State who is entitled to 100 *francs* a year, for example, has an inalienable, imprescriptible, and absolute right to receive a hundred times 5 *grammes* of silver, of the standard of 9-10ths fineness. He would be despoiled of his property if he were paid with a quantity of gold less than this equivalent, in the same way as if his claim were discharged with only 80 or 75 discs of silver, of the weight of 5 *grammes*, of the fineness of 9-10ths, instead of 100 ; or as if he were paid with 100 discs containing 4 *grammes* of fine silver only, instead of $4\frac{1}{2}$.” And he finally makes the following appeal to the conscience and the self-respect of France :—

“It is true that there is no tribunal before which the State can be made to appear and hear itself condemned to pay the arrears of its dividends in silver to the public creditor ; or, if gold has been resorted to, to pay a real equivalent of the quantity of silver which corresponds to the number of *francs* borne upon the dividend warrant. But, if no such jurisdiction has been established, it is because it has been supposed

that the State would interpret with exactitude the law, both when it is against and when it is in favour of itself, and is it well that society should have to repent that it has adopted this hypothesis? In this case exactitude assumes another name—honesty. And even if there be no precise jurisdiction before which the State can be summoned by the instrumentality of a bailiff, and be compelled to make an appearance, there exists, nevertheless, a tribunal by which it can be judged, and whose decisions, though tardily given, and involving no material consequences, are yet not less formidable, and strike with terror even the most powerful. It is the tribunal of history, by which all governments know they must one day be judged with an impartiality which they sometimes anticipate with hope, but which ought always to be felt as a restraint. In dealing with a government which respects itself, it suffices to invoke this august tribunal, the *last argument* of a people, the supreme support of right, and the bulwark of the feeble against the strong, to confirm it in the sentiment of justice even when it shall find itself under the temptation to swerve from it.”

SECTION VI.

CONSEQUENCES OF THE FALL IN THE VALUE OF GOLD.

CHAPTER I.

A GENERAL DISTINCTION BETWEEN THOSE PRIVATE INCOMES WHICH WILL, AND THOSE WHICH WILL NOT BE, AFFECTED. OF A CERTAIN COLLECTIVE LOSS WHICH THE PEOPLE OF FRANCE WILL SUFFER.

I WILL suppose the case of an inhabitant of London, who is possessed at the present time of a certain income, for example, of £1,000 sterling. Assuming the event of the fall in the value of gold to have been completely consummated, he will continue to receive, as at present, for every pound sterling composing his revenue, a metallic disc containing 7 *grammes*, 318 *milligrammes* (113 grains) of fine gold, for that is what constitutes the piece called a sovereign, or the pound sterling. But the fall being accomplished, if gold has lost the half of its value, then, in transactions where one piece of gold was previously sufficient, two will be required, so that with the

same number of discs the individual in question will only be able to procure in bread, in meat, in all kinds of articles, in every description of gratification, the half of what he would have obtained before this monetary revolution. Thus, in order that he might not be impoverished, in other words, that he might have the same subsistence, it would be necessary that his income should have nominally doubled itself, that it should be £2,000 instead of £1,000. This observation relative to a person residing in London would apply equally to an inhabitant of Paris, provided we still continue the tolerance, not to say the negligence, by virtue of which gold is unduly circulated on the footing established by the law 7 *Germinal*, year 11, notwithstanding that events have since overthrown the hypothesis on which, so far as gold is concerned, that law was framed.

It follows, therefore, that if we would particularise the persons who will be more or less deeply affected by the fall in gold, we have only to select those whose income, expressed in monetary units (the pound sterling in England, and the franc in France), will not find itself augmented, naturally and by a self-adjusting process, in exact proportion to the fall, and by the very fact of the fall in gold.

All those persons, whose incomes expressed in monetary units remain the same, would be injured by the change to the extent of the half of their income, all other things being equal. The national creditor is the characteristic type of this class of sufferers.

The proprietor of government stock is in fact the holder of a title by which a certain State engages to pay yearly a given number, agreed upon previously, of *francs* or pounds sterling; in other words, a well-defined quantity of metal. The current value of the capital of the public funds in each State is regulated by this very quantity; all other things, such as the solvency of the government, the degree of con-

fidence which it inspires, and the abundance of capital upon the market, being equal.

All commodities excepting gold, and every kind of property excepting that of which the income is from the present fixed, as is the case with the government funds, ought, from the moment that the monetary crisis is terminated, to have attained in a gold currency double the price which they are at present worth, upon the supposition, quite arbitrary I admit, of the depreciation reaching fifty per cent. Thus, a house or a landed estate now worth £4,000 or 100,000 *frances*, would then sell for £8,000 or 200,000 *frances*. The *hectolitre* of corn or of wine, the *quintal* of iron, or the *metre* of calico, will undergo the same rise, at least if no change conducive to cheapness be introduced into the conditions of their production, or into the relations between the supply and demand. It will be the same eventually with the wages of labour, and with all personal services, whether rendered in the factory or the farm, or from the liberal professions: we are warranted in believing that their value will have doubled.

Thus, as a definitive analysis, the proprietors of lands, houses, and other real estates, manufacturers, merchants, and their auxiliaries of every kind; public functionaries of all ranks; and also those who follow the different learned professions, will all find themselves in the end compensated in the new state of things with advantages equal to those which they now enjoy,—all other things being equal. It is another class of persons, whom we have previously defined in a general way, who would have to submit to a sacrifice in proportion to the fall in the precious metal.

Looking merely to the substitution which would have to be made in the currency of a country like France, where gold is taking the place of silver, that country would experience a sense of very serious disappointment at having exchanged a commodity which has actually a fixed value—

its coined silver—for another metal the value of which is declining and must fall one half, according to the supposition which we have made, and which we have adopted solely for clearness of speech and precision of argument. The quantity of silver on which this disastrous exchange had been effected to the 1st January, 1858, was not less than a *milliard* (£40,000,000), which has been bartered for gold at the rate of $15\frac{1}{2}$ kilogrammes of silver against 1 kilogramme of gold. At this rate, France will find at the close of the fall that she has been on an immense scale, almost imitating the trade of a certain sporting individual who, for a wager, passed a morning on London Bridge offering sovereigns to the passengers in exchange for shillings. Assuming that at the point of departure the silver currency of France amounted to $2\frac{1}{2}$ *milliards* (£100,000,000), this beautiful operation would cost her a very considerable amount, a sum so much the nearer to 1,250 millions (£50,000,000) in proportion as the abstraction of her silver had been more rapidly effected ; and down to the commencement of 1858, the silver was flowing out of France at a very great speed. It would be more than the above large sum, if the depreciation of gold were upwards of one half, or if, being one half only, the silver currency of France had been at the point of departure upwards of $2\frac{1}{2}$ *milliards* (£100,000,000).

The sum of 1,250 millions (£50,000,000) is too large to be lightly sacrificed, and yet it is not the loss which seems to me the most to merit our attention. The great danger and the great evil are the anxieties, the uncertainty, and, finally, the injuries which will fall upon a multitude of interests calling for our consideration by their mass, and for our respect by the justice of their case and the sympathy which it excites.

CHAPTER II.

OF THE SUFFERINGS AND DIFFICULTIES WHICH WILL
ACCOMPANY THE TRANSITION.

It is not merely the ultimate result that should be considered : the statesman and the administrator ought also to take largely into account the transition, that is to say, the rather lengthened period which must intervene before gold shall have achieved its fall, and regained almost a stable value ; or, it might be more proper to say, the space of time which must elapse before the full effects of the fall in gold shall have been realised in all their bearings. This transition will be an interval painful to pass over, and will be marked by innumerable shocks and sufferings, of which I am about to give a summary idea : it will be the occasion for offering a few details upon the different interests which are likely to be affected by the fall in the value of the precious metal.

During this transition, then, the value of all properties will be subjected to a painful uncertainty, and to injurious fluctuations. It will be still worse for those persons to whom I have already alluded, whose incomes consist of a sum of money (Napoleons or sovereigns) fixed in advance. They will live in a perpetual state of trouble, anxiety, and uneasiness. They will sink by whole sections from their present state to another in which they will enjoy only the half of their previous comforts ; reasoning, as I always do, upon the assumption that gold falls to the half of its present value. They will be flung headlong, without rule or measure, down to a lower station, and without ever having the chance of preparation, for it is the very essence of changes of this kind, subjected as they are to many opposing influences, to

pursue an irregular and disorderly course. Now, the persons of whom I am here speaking, comprise a very numerous and various class. They are, in the first place, the creditors of the State, of departments, of cities, and of joint-stock companies. To form an idea of the number of persons and families who would be comprehended under this head, it suffices to call to mind that, in England, the capital of the national debt amounts to 20 *milliards* of francs (£800,000,000). I am unable to say what may be the amount of the debts owing by local bodies, and by public companies in the British islands ; but I run no risk of deceiving myself in asserting that it is an enormous sum. In France, the capital of the funded debt is nearly 7½ *milliards* (£290,000,000), deducting the amount belonging to the sinking fund. The number of persons interested, if it were determined by that of the entries in the books, would amount to more than a million.* The departments and the cities owe a very large sum, and the bonds of the railway companies, without speaking of the debts of other companies, rise to a very great amount.

There would be, besides, all the superannuated public servants, from whose salaries had previously been deducted the amount of their pensions, as well as all those who might undergo a similar ordeal up to the time when the law should have fixed a new scale of pensions ; all persons who should have lent money for a long term on mortgage ; all those who lived upon fixed incomes of long duration ; individuals or companies like that of the *credit foncier*, who were in the receipt of annuities in payment for loans of capital ; those

* On the 1st January, 1857, the capital of the funded debt amounted to 8,031,992,446 francs (£321,279,700). The interest of the sinking fund amounted to 25,462,159 francs (£1,018,486), which is equal to a capital of about 750 millions (£30,000,000). The number of entries in the great book was 1,028,284. The interest, including that of the sinking fund, amounted to 299,099,242 francs (£11,963,970).

who might have invested their property for life ; and all those proprietors who might have let their land on long leases. In the latter case, until the metal had found a stable value, long leases, so much advocated by agriculturists, would be a serious evil to the landowner, and thus the monetary crisis would react in a disastrous manner on agriculture, and tend to place it in a retrograde position.

We might add to this list, in a great measure, the multitude of public servants, civil and military. Not that they would be precluded from the hope, under such circumstances, of an augmentation of salary ; we may suppose that a time would come, when by successive additions to their pay, they would receive in the number of *francs* double their present salary ; but it is in the nature of things that additions of this kind arrive by a very slow process. This is proved by what we see taking place with regard to many functionaries, even those who enjoy the greatest public esteem, as, for instance, the magistracy. For how many years has the same tale been told them, that they are always on the eve of an increase of their incomes, which are notoriously inadequate, but the morrow never comes. The painful and almost humiliating position of a petitioner for an increase of salary, would have to be again and again submitted to by the government employés, because the force which causes the depreciation in the value of gold, acting only successively, it would be by three or four intermediate steps, with difficulty climbed, that they would have to pass before their salary reached its normal rate. For them, then, there would be a constant anxiety ; they would always feel themselves in danger of being left with insufficient means for the subsistence of their families.

There is reason to believe that the administration of the affairs of the country would suffer from this sad condition, moral and material, of the servants of the State. It is natural that they who believe themselves insufficiently re-

warded for the pains they bestow, and the services they render, should fall off in their devotion, and slacken in their zeal. There may be exceptional cases of individuals, who are above these worldly motives ; but the majority bow to them, especially after a little time. We are not justified, after all, in requiring from functionaries all the activity and care which the business of the State demands, if we persist in paying them badly. Inadequate salaries deter numbers of men, who know their own value, from entering the public service, and drive them into private employments. The best of natures may, under such circumstances, become embittered. No one can be more inclined than myself to bear testimony to the disinterestedness of French functionaries. They are, at least, in this respect, upon a par with those of any other nation. But there is no reason why they should be subjected to the temptation which flows from straightened circumstances, and which has perverted the administrative morals of a certain great State which I could mention.

All the liberal professions, such as barristers, physicians, professors of every kind, engineers, architects, and a multitude of agents of every description, would also have to raise, again and again, the amount of their fees, a process which would often endanger their position, which they had flattered themselves to be secure.

For the working-classes it would be a trying ordeal. In a certain point of view they may be said to work for fixed salaries ; because, in those countries, especially where population is somewhat dense, the employers of labour resist the increase of wages, which deranges their plans and baffles their calculations. Experience shows that when provisions rise wages are not necessarily raised in the same proportion. Not that an upward movement of wages does not follow a continued dearness of provisions, but in the majority of employments it follows far behind. The working population

are of all classes of society the most dependent, because they are the most necessitous. Being the least able to wait, owing to the pressure of want, they are the more apt to resign themselves to the terms offered them. Hence it is that the benefits which they expect to derive from a rise of wages are only yielded to them after many delays. It were easy to cite examples in proof of this assertion. It has been the subject of remark by Mr. Tooke, in his important work the *History of Prices*. In his historical inquiry respecting the *precious metals*,* Mr. Jacob has several remarks in the same sense, and among others he states his opinion that the institution of the Poor-law, which it is known dates from the reign of Elizabeth, was in England the effect of the changes caused by the fall in the precious metals. This opinion has been recently reproduced by an English writer, Mr. James Maclaren, in a remarkable publication, the title of which even is calculated to excite an interest, and to which I shall again shortly refer.†

The same observation applies to the numerous class of other employés in manufactures and commerce, because these employments are also overburdened. Those only, who by their talents are above the average, would be able to command an immediate increase of remuneration in metallic money; men of capacity, in whatever walk of life, are the exceptions; manufacturing capitalists, or intelligent merchants are too happy to find them, and neglect no means of retaining them. But it is not with the exceptions, but the masses, that we ought to occupy ourselves.

Landed proprietors would be a privileged class in the

* *On the Precious Metals*, Vol. II., Chap. XX.

† Letter to the *Chancellor of the Exchequer*, on the resolution to which the German States have come to adopt the silver standard, and on some circumstances which render an invariable measure of value of more importance to England than to any other country.

midst of this general derangement, inasmuch as the value of land would increase gradually in proportion to the fall of gold, at the same time that the price of provisions, which constitutes their income, would also rise. Yet even they would, during the transition, have their share of care and embarrassment. Their path would be strewn with difficulties every time they had to sell their land; for what was at each instant the legitimate rise, the justifiable increase of price, would be difficult if not impossible to determine with any accuracy. In this article, as with a multitude of others, transactions would assume a gambling character.

It would be easy to cite many investments at present very much sought after, which would become hazardous, inasmuch as the capital would diminish by a self-acting process, and waste away, so to speak, by a species of consumption. Such investments, so long as the transition lasted, would lose the favour with which they are now regarded. In this category I should include all those which may be termed financial investments, that is to say, those of which not only the capital is valued in money, but which will or may at a given moment be converted into a sum of money fixed or nearly so beforehand. I mean into a weight of metal previously determined with greater or less precision. I have already cited the public funds, and railway bonds. Bank shares, and those of similar establishments, partake of the same character. In the countries to which my present statement refers,—and I repeat that it is those which should possess in their monetary system the gold standard, as well as those which should leave things to take their course as if gold were legally invested with that attribute,—the loans of the State, of provinces, and of cities, as well as those of public companies would, as we have already said, be negotiated, so long as the transition lasted, on harder terms than they had been previously.

But there are grounds for apprehending many other difficulties, political or administrative. It would be necessary to enlarge the budget, for wherever the State appeared as a customer, it would have to pay dearer than formerly. It would, besides, be necessary to increase the salaries of all its employés, civil and military. Even to half satisfy only the just demands of its impoverished functionaries, it would be obliged to call for further contributions from the taxpayers, for how numerous in certain countries, in France for example, are the servants of the State! The augmentation of the budget, assuming it to be considerable, means an aggravation of the public burdens, which excites, even when justifiable, the popular discontent, just in proportion to the degree to which taxation is increased. I believe I run no risk of contradiction, by any politician, in saying that a government which should have to double the taxes in the course of a few years would thereby incur very great perils.

Not but that several taxes could be named, and some of them very productive, which, in the event of a fall in gold, would yield spontaneously an increased revenue, just in proportion to the fall in the precious metal. The duties which adjust themselves to the value of the articles taxed are of this number. This would be the case in France with the registration tax, which is nearly always a percentage on the amount of capital employed in the transaction subjected to the tax. It is the same with the duties on beverages sold by retail. As for the customs duties, those which are levied *ad valorem*, would afford this natural increase; but in nearly all countries, and especially in France, they are the exception. But such imposts as the land tax, which are expressed by fixed sums of money, would have to be augmented by law, to be made to yield to the treasury a revenue of equal value. Now, is the government of France disposed to present itself before the legislative body to demand the

doubling of the land tax, by successive additions extending over ten or fifteen, or even twenty years? Does it believe that such a process would benefit it much, or increase its popularity? And yet to some such measure as this would it have to resort,

Thus the budget would be subjected to a perpetual revision, both in its expenditures and receipts. Every three or four years it would be necessary to re-arrange the tariff of the different imposts; and to fix the rate of all the salaries, from the pay of the soldier and sailor, or that of the rural policeman, or the Custom House officer, to the income of the prefect, or the marshal of France, the stipend of the great officers of State, and, in all conscience, the civil list of the sovereign himself. It would also be necessary to revise, more or less often, the scale of charges of ministerial officers, or agents of every kind, lawyers, barristers, registrars, &c., a class of persons with whom there is no escaping a reckoning, as recent experience has shown.

A similar operation would be necessary with the tariffs of charges which have been fixed for a multitude of companies, such as those of railways, canals, docks, and bridges. In some cases these have been fixed so high, originally, that the companies have not found it necessary to levy the full rates. Of this number, however, we can hardly specify more than those which relate to the freight traffic on the railways; beyond that, as, for instance, for passenger fares, the full charge allowed by law is (in France) levied. It would seem to me only consistent with equity that the fares should be raised from the moment that a state of things, so unforeseen and so uncontrollable, arose as a recognised fall in the value of the metal of which money was made. All these changes of tariffs would be a labour of infinite difficulty for government, and an endless source of discussions with the legislative body.

The endowments and incomes of charitable institutions, which are frequently invested in the public funds, a mode of investment which they are now urged to adopt in preference to all others, would gradually diminish in value, and, to maintain them on their original scale, it would be necessary to resort for assistance to the State, or to the localities.

Optimists will tell us that the inconveniences which have been here indicated as the consequence of an increase of the budget will not be serious, inasmuch as the value of the pieces of money having fallen, the taxpayer will not find himself surcharged if he be only called upon to pay an increased number of pounds sterling, or of francs corresponding simply with the depreciation of the metal. But it must be borne in mind that it is only after a certain lapse of time that the public at large will have familiarised itself with the idea of a depreciation of the currency, and will have become reconciled to the consequence in the form of an increase of taxation. If the rise in every description of property, and in incomes of all kinds, such as salaries, fees, &c., were to be effected uniformly, according to the same gradation, the public intelligence would soon accommodate itself to the change ; but matters would take a very different course. It is in the very nature of things, I repeat, that such an event as the fall in gold, would be accomplished, so to speak, by jerks, and by very unequal steps as respects the various objects affected. It would be a confused state of things, arising out of the action of accidental causes, which would frequently and unexpectedly arise, and which would baffle all control. To some extent it would be a justification for the instinctive antipathy which the people feel for an increase of taxation, and supply them with arguments which in their minds would have considerable force.

I do not believe I exaggerate in saying that the transition period, which it would be necessary to pass over before the

fall had achieved its full effect, and gold had regained a somewhat stable value, would offer features of instability and discontent characteristic of revolutionary epochs. On this subject I shall be excused if I here quote an observation made by Mr. Jacob, in his work on the *Precious Metals*, when describing the effects of the rise of prices which followed the discovery of the mines of America.

“There is some ground for the opinion,” says he, “that the tendency to increased expenditure (caused by this rise of prices), whilst a large part of the revenue of the crown remained stationary, was one of the causes which gave rise to the civil war under Charles I., the result of which was the loss of that unfortunate prince’s life.”*

CHAPTER III.

ON THE GAIN WHICH WOULD RESULT TO CERTAIN CLASSES
OF PERSONS, AND TO SOCIETY, FROM THE FALL IN GOLD.
THE SAVING TO THE STATE FROM THE PAYMENT OF THE
DIVIDENDS ON THE PUBLIC DEBT.

WE have explained, rapidly and incompletely, the deplorable consequences which a fall in the value of gold would entail. It is right to examine whether this revolution would not also present some results of an advantageous character. There is one very easy to comprehend; supposing that the fall of gold be to the half of its value, a proportion that I enounce solely by way of example and for clearness of illustration, it will follow

* *On the Precious Metals*, Vol. II., p. 103.

that, at the end of a given time, the raw material of certain articles of luxury, altogether made of gold, will have fallen one half. Then we shall be able to strike our gold medals at a cheaper rate ; the gold snuff box will be a luxury within the reach of a greater number of purses ; and our Crœsuses will be able on their fête-days to adorn their sideboards a little more easily with cups of gold. I say a little more, and that is all ; for in these objects, the art and design, which form a considerable part of the price, will not have fallen, but the contrary ; the fall will be confined to the raw material. Still clearer is it that gilding will not experience a great reduction, for it is not the weight of gold employed in it that constitutes its chief expense. I see no other permanent advantages which a people, free from the burden of a heavy national debt, can hope to derive from this depreciation of gold, after the epoch when the crisis of the transition shall have passed. The advantage is not great, it must be confessed. There are few articles in which a fall to the same extent would not be a greater benefit. What a contrast, for example, with the service that would be rendered to all classes of society by a reduction of one half in the value of coal or iron, or even of copper or lead ! I do not speak of bread or meat, in which a reduction of price to the same extent would produce incalculable effects.

Independently of the facilities which the fall in the value of gold would afford for procuring plate and articles of luxury, into the composition of which this metal enters, a certain compensation must be noticed, which would not be unimportant. Having indicated the classes which would suffer from the fall of gold, it must be added that there would be gainers as well as losers. If the creditor be obliged to give a discharge, on receiving a value smaller than that for which he believed himself assured, if, for example, the 100 pounds sterling paid to him represent only the enjoyments which

he would have previously procured for fifty, he is assuredly a loser; but the debtor benefits to the same extent. The 100 pounds sterling which he will have repaid, will have been procured with one half less labour or privations. Against the majority of the losses which we have enumerated, there will, then, be a set-off of gain of the same importance. On this point two questions arise, which deserve our attention: the one is whether for society, taken in its mass, there is compensation; and the other, whether equity sanctions the loss which the one suffers, and the gain which the other acquires.

On the first subject, I shall only add a word to the remarks I have already submitted to the reader. Changes which affect deeply and suddenly, or in a brief interval, a very great mass of interests, are nearly always to be regretted, even when at the same time, and by the same act, a considerable number of persons find themselves deriving advantages. It is for society a perilous trial, especially when the working population find themselves among the number of the suffering classes; it is, in fact, they to whom patience is most difficult, since they possess the fewest resources. Society would, under these circumstances, have to pass through an ordeal, which, I think, I have justly characterised as revolutionary. If the qualification be just, it enables us to appreciate all the dangers of the transition. With skilfulness, and in a season of tranquillity, a people may pass without disaster through such a trial; but it requires also good fortune. Now, can anyone, without presumption, flatter himself that he will possess at any one moment, and enjoy during a succession of years, these three gifts of heaven—tranquillity, skill, and good fortune?

Let us rather insist on the second question, that of equity. It is not without its bearings on the first; for when events are in conformity with right, it is in human nature generally

to resign itself to them. On the contrary, indignation and resentment easily take possession of a man when he feels that justice is violated in his person.

Among the results which may be expected to arise from the fall of gold in those countries where this metal forms the sole or the dominant currency, I will recur to one of the most important for the purpose of examining it from an equitable point of view; I return to the case of a proprietor of government stock. Let us suppose the case of an inhabitant of London, living on an income of £1,000 a year from Consols. During and after the depreciation of gold, as well as before, he will receive his 1,000 discs of metal, containing, altogether, 7 *kilogrammes* and 318 *grammes* of fine gold; but with this sum he will have only the half of the enjoyments which he possessed previously. Is there or is there not in such a diminution of subsistence anything which can be taxed with spoliation? I do not think there is, in the case of England. For what is the engagement into which that State has entered? By the very fact that England has a gold standard, the creditor to whom the British government owes a pound sterling can claim no more than the quantity of gold, to which the law, once for all, has attached the denomination of a pound, that is to say, 7 *grammes*, 318 *milligrammes*. The State is bound to furnish to the creditor for a pound this quantity of metal; it has, strictly, no other obligation. If in paying the British creditor in former times, when the value of gold *rose* in proportion to other commodities, the government had attempted to deduct from the dividend 2 or 3 per cent, or more, it would have been denounced as an act of spoliation. In the possible case that the mines of Australia, California, and Northern Russia had remained undiscovered till half a century later, and that the productiveness of the old mines had diminished, the English government would not have been justified in reducing the

amount of interest, and paying only three-fourths or two-thirds of a sovereign instead of a whole one, under pretext that gold had risen in proportion. The law is the same for the debtors as the creditors. The latter have no claim beyond the quantity of gold which has been agreed upon as forming the pound sterling, if gold, instead of rising, should fall in value. The two parties have run the risk of a variation in the value of gold ; and to whichever side the chance turns there is a legitimate profit. Thus, for England, which has the gold standard, strict equity is not violated by the change, unlucky though he be who may prove to be the creditor of the State. There remains, however, a question of social and political propriety on which we shall afterwards offer some observations.

Would the case of France be similar to that of England ? Would the former State, by the letter of the law, or in equity, be warranted in profiting by the fall of gold, and paying its debts in a cheapened currency ? Can it take advantage of the circumstance, that the 29 *centigrammes* of gold which in the year 11 were equal to $4\frac{1}{2}$ *grammes* of fine silver, constituting the *franc*, appear now for the moment to be of much less value, to pay its creditors in gold ? This is a question of good faith, the solution of which, after the statements already submitted, ought not to be very difficult. It would be a violation of justice, because France has a silver standard. In the French currency, silver, according to the preamble to the law of the year 11, is the fixed point, and this fixed point is the guarantee of the equity and honesty of transactions, the security for the preservation of property. Nor is it possible to swerve from this fixed point, without wanting in probity, the rules of which States are bound, even more than individuals, to observe.

If silver had fallen in value, the French government would have been justified in paying its creditors in silver as

before. It is in silver that the agreement has been made. The law has declared, once for all, that $4\frac{1}{2}$ *grammes* of fine silver shall make a *franc*, neither more nor less. Thus, as was declared by Gaudin, in a passage which I have already quoted more than once:—"He who shall lend 200 *francs* can at no future time be repaid with less than a *kilogramme* of silver,* which shall always be worth 200 *francs*, and never be worth more or less."

Nobody can say that some day silver may not also undergo a great fall, brought about by a production which should be distinguished by the two following characteristics: of being much greater in comparison with the employments to which it had hitherto been applied, and of being produced under more favourable circumstances, that is, at less cost per *kilogramme* for the metal obtained. There are strong reasons for thinking that if the United States annexed Mexico, and penetrated further into the regions of Central America, this event would not be of tardy accomplishment, under the auspices of a race so industrious and so enterprising as the Anglo-Saxons.†

It may be doubted, however, whether, unless under circumstances of a most extraordinary character, the change in the case of silver could be so sudden as it has been in that of gold. The nature of the argentiferous deposits, the obstacles they offer to the miners, and the complicated processes by which the metal is abstracted from the ore, combine to reject the hypothesis of a rapid change in the value of silver. Nevertheless, a fall in silver is an event to be anticipated, an event even probable at no very distant date, and it offers to the French government a chance, and the only one, of profiting legally at the expense of its creditors.

* Of the standard of nine-tenths fineness.

† I have alluded to this subject in the third volume of my *Political Economy*, Section III., Chapters I. and II.

Owing to the discovery of the new gold mines (if those mines should continue to be what they have been up to the present day), a time will come when a change will come over the British treasury as if some genii, an enemy of its creditors, had spirited away their dividend warrants, and substituted others of only half their value. Not that the number of pounds sterling due to them as principal, and of which the interest is counted to them every six months, will be diminished; not that the quantity of gold contained in the pound sterling will be lessened; but the British treasury will henceforth draw from the taxpayers' each pound sterling, with as little difficulty to them as it previously took to pay a half sovereign; and the unlucky fundowners will obtain for the pound only half of the enjoyments which it now procures for them; and yet, in strict right, they will have no reason to complain. As for the French treasury, it will have no right, unless by a flagrant iniquity, to expect any similar profit from the discovery of the new gold mines.

SECTION VII.

OF THE MEASURES TO BE TAKEN TO AVERT THE EVIL EFFECTS OF THE FALL OF GOLD.

CHAPTER I.

CASE OF A STATE LIKE ENGLAND, WHERE GOLD IS THE
STANDARD, AND WHERE THERE IS NO OTHER MONEY BUT
GOLD.

SUCH, then, is the perspective which presents itself to the inhabitants of a certain number of States, and particularly of France and England. Simultaneously with the fall of gold, there will be a period of great suffering for a very large number of interests worthy of consideration and sympathy, a period full of danger to the tranquillity even of States, and to the regular progress of society. In England, an inflexible law seems to warrant these hardships and sufferings. In France, which is threatened with the same danger, we find a legislation which was matured half a century ago, an intelligent, honest legislation, in the name of which the aggrieved interests might loudly protest and declare that in them a sacred right had been denied and violated. In these circumstances what ought to be done?

In the countries where gold is the monetary standard, as in England, it is not easy to indicate what should be done; it may even be contended that there is no ground for doing anything. Yet, even in England, some persons have put forth the advice that the standard should be altered, and that silver should be substituted for gold. They ground their opinion primarily upon the plea of principle, in maintaining that gold having ceased for an interval of time, which may possibly be rather long, to satisfy the essential condition of having a value relatively stable, it thereby loses its aptitude for the functions of money.

A change in the standard is a serious act, to which we have no right to resort till after the gravest deliberation, and until we are well assured that we have reason and justice on our side, as well as the highest and most legitimate public interests. Still, the substitution of one precious metal for another, for the important attribute of a standard, would be far more easy to justify in the case of abandoning the metal which was threatened with or had already experienced a gradual fall, than if it were proposed, as has been done by some persons in France, to divest of the quality of the standard a metal which preserves a relatively stable value, to bestow it upon another, the value of which is undergoing a fall. Still, a change of standard, even under the circumstances in which gold would be replaced by silver, in England, at the present time, would be open to very serious objections. Debtors of every kind, to whom this substitution would necessarily be prejudicial, would say, not without justice, that if it be true that in the present state of the law, as regards the standard, a fall in the value of gold must turn to their advantage, it is equally true that a rise, if it had taken place, would have been to their detriment, and to the benefit of their creditors: if fate has decided in their favour, it is for their creditors to submit, as they should themselves

have done in the opposite event : and, they might add, have not there been periods in the modern history of England when the debtor has had to suffer from the rise in gold, either by comparison with its past value, or by comparison with the paper money which he, the debtor, had received when he borrowed in the period from 1797 to 1821, and which he has since the latter date had to repay in gold ? And has not this been attended with precisely the same result as if the theory of a rise in the precious metals had been realised ? If, in these circumstances, they had demanded a change in the monetary system of the country, they would certainly not have been successful. By the same reason, may they say, there would be no ground now for entertaining the remonstrances which the creditor might offer on the occasion of a depreciation in gold.

An argument which, in the eyes of the public authorities of England, will weigh with great force, and incline the balance towards the maintenance of the present standard, is furnished by the enormous amount of the public debt, the annual interest of which amounts to about 28 millions sterling, or 700 millions of *francs*. It is a burden which, whilst it remained nominally the same would, in fact, be alleviated to the extent of one half to the taxpayer, provided that the present standard were preserved whilst the value of gold had fallen in the above proportion ; and, in effect, when once the fall in the metal was accomplished, it would be as easy, on this assumption, to pay two pounds sterling of taxes as one pound at the present time. A less decided reduction of the heavy burden of the national debt, would, in all probability, be a powerful argument with such an assembly as the parliament, which leans naturally in the direction where relief may be had for the contributors to the revenue, and which in the present case would have powerful reasons for justifying such a course.

With regard, however, to this advantage, which it would be warranted in strict right to claim for the taxpayer, parliament ought to weigh the mass of inconveniences, and even of perils, which must necessarily result from the maintenance of a currency in a decided course of depreciation. I have indicated what are the changes which a fall in the metal, of which money is made, might occasion to a multitude of interests. It ought, I think, to be enough to kindle the emotions of even a statesman possessed of the firmness which distinguishes peculiarly the governments and people of England. But yet, it would be easy to add to the generalities which I have already presented, other facts springing from the social life and habits of England. The part performed by the British funds is very extended. Consols are the investment of a mass of capitals which are worthy of the particular solicitude of the legislator. The funds, which are held by trustees, or under the guardianship of the Court of Chancery, and which constitute the fortune of a multitude of minors, are all placed in the public funds or on mortgage, which amounts to the same thing ; I mean, runs the same risk. The endowments of a multitude of churches, schools, hospitals, and valuable institutions of all kinds, are also invested in the public funds. In a great number of cases, the fortunes which a father leaves to his younger children are represented by sums of money charged upon his estate, the interest of which the oldest son discharges. The number of persons who live upon life-incomes, or who have already made payments with a view of some day securing one, is very considerable in England. Life assurance, with a view of securing to a person a certain income in case of such or such an eventuality, is practised by the English to an extent of which we have no idea in France. The consequence is, however, clear. Under these various forms, and even under others, myriads of existences

would be troubled ; the very foundation of property would be assailed in the mode of its partition among children ; habits worthy of encouragement, such as assurances of lives, with their multiplied combinations, would be destroyed. The custom of making investments in the public funds, which is eminently favourable to the credit of the State, and at the same time tends to perpetuate prudence among the people, would be deprived, during a considerable lapse of time, of the advantage which it now offers of guaranteeing for the future a certain degree of comfort,—thus necessarily weakening, if it did not destroy, this motive to accumulate. Taking into account the whole of these circumstances, and the discouragement which would be thrown upon habits which are so favourable to society, and even to the British treasury, there is enough to make parliament pause even when in presence of the temptation which an effective reduction of the public debt could not fail to exercise.*

CHAPTER II.

CASE OF A STATE, SUCH AS FRANCE, WHERE THERE IS A SILVER STANDARD, BUT ALSO A GOLD CURRENCY.

IN States, like France, where the law acknowledges only a silver standard, and where of right gold fills in the monetary system but a subordinate rank, the remedy of the evil is, in a great measure at least, less difficult to discover, and the legislators, in coming to a decision, would have fewer

* These considerations, among others, are presented with great force by Mr. James Maclaren, in the work which I have already cited.

perplexities to surmount than in the case of England. It would suffice if we were to put an end to the toleration, contrary evidently to the spirit of our laws upon the matter, in virtue of which gold will continue indefinitely, unless provided against, to take its place in the circulation on the same conditions as if it always preserved, in comparison with silver, the same value that it had done half a century ago.

In the system of French legislation, if gold instead of being worth, as in the year 11, $15\frac{1}{2}$ times its weight in silver, were only worth the half, that is $7\frac{3}{4}$ times, it would be necessary to take such measures with regard to the currency, that that which should be a franc in gold, that is to say the legal equivalent of the piece of 5 *grammes* of silver, of nine-tenths fineness, should comprise 58 *centigrammes* of the precious metal. Such are the spirit and even the text of the law. It would be necessary to subject the gold coinage to an analogous change, should gold, instead of falling one half, only fall to ten times the value of silver, or to twelve, or fourteen, or even to fifteen times. Now, by what mode is this transformation to be arrived at? Would it be by recoinage the pieces of 10, 20, or 40 *francs*, so as to just double the fine metal which they contain, on the hypothesis of a fall of one half?

So understood, the process of recoinage would encounter, in its execution, a difficulty which appears to me insurmountable: to have always coins of a fixed value, of 20 francs for instance, it would be necessary to repeat, indefinitely, the process of melting; it would have to be resorted to whenever gold declined 3 or 4 per cent in comparison with silver, or, more properly speaking, at even shorter intervals.* Gold

* I remember that a change of one and a half per cent in favour of gold, about 30 or 40 years ago, caused it to disappear entirely from commercial payments.

coins would have hardly left the scales before it would be necessary to return them there again. Such a fluctuation in the intrinsic value of a gold coinage is repugnant to common sense, and is absolutely inadmissible. Such a process of remelting may have been tolerated when a slight variation in the value of gold was foreseen, and also on the supposition—not a very probable one—that the period of the disturbance would only last, so to say, for a moment, and be followed immediately by an almost mathematical stability. From the moment that there is a prospect of a considerable variation, which, from its very magnitude, cannot be completed until after a considerable lapse of time, and which seems likely to be attended with many fluctuations, this expedient becomes impracticable, nay, let me say, chimerical.

It would be better to recoin the gold once for all, and adapt it to another system, by giving the coins a fixed weight, in relation, simply, with the base of the metrical system, instead of always trying to bring them, by alterations of weight, to a fixed value, such as 40 francs, 20 francs, or 10 francs. Pieces of gold might be coined of 5 *grammes* or of 10 *grammes*, like the piece of one franc in silver, which weighs just 5 *grammes*, and the piece of two francs which weighs ten. It would be to revert to the plan which was recommended by Mirabeau, by the old authorities of the Mint, by the Institute as a body, which was adopted by the legislature in the year 3, and to which, in the year 6, it gave a renewed proof of its adhesion.* It is, also, the idea which was recommended by the section of finance in the Council of State during the discussions of the year 11. The value of these pieces, that is to say, the number of

* See Section IV., Chapter III., for what passed on the occasion in the two legislative councils.

francs and fractions of francs which they would be worth, would vary according to the market value of gold in comparison with silver. To save individuals from the annoyance of bargaining over each payment, this value might be fixed every six or twelve months, by an official regulation which should give, for the basis of the value of the gold coinage, the market value of this metal, in comparison with gold on the principal exchanges of Europe, such as London, Paris, Hamburg, or even the average of the exchange between these different States having different metals for their standards. This would be to adopt the first idea of Prieur, and the Committee of the *Five Hundred*, perfected by Crétet and the Committee of the *Ancients*.

Nevertheless, it is a question for consideration, whether the payments from individual to individual, to which this legal quotation of gold applies, should not be limited to a certain maximum, such as, for instance, the sum of 1,000 *francs* (£40), and whether for larger sums the transactions of individuals ought not to be left to the contract of the parties.

The arrangement which I have just indicated, I mean the recoinage of the gold currency into new pieces, containing a round number of *grammes*, is of all plans the most philosophical, and the most in conformity with the best established views respecting the currency: habit would soon easily accommodate itself to it, and it is that which gives to the future the surest guarantees against such monetary derangements as we are now undergoing. The only fault to be alleged against it, is the necessity not only for a general but an immediate recoinage. With a little reflection, however, it will be found that the inconvenience is not serious, for it will be very easy, and at little expense, to melt and recoin one or two *milliards* (£40,000,000 or £80,000,000), and the circulation of France restored to its normal state, will not require two

milliards of gold, alongside of the silver money and bank notes.*

Another and more simple expedient might be adopted, provisionally, until the new coinage was determined upon, and which would change the state of things instantly and without expense. A law might be passed declaring that henceforth the piece of 20 francs shall only be worth 19, or 19 *francs*, 50 *centimes*; afterwards, when the fall of metal shall have been more decided, a new law might pronounce it to be worth 18 *francs*, 50 *centimes*, or 18 *francs*, and so on. This is what was done in Russia, where the edict of 1810, which offers a great analogy to the French law of *Germinal*, year 11, had ordered the fabrication of *imperials* and *half-imperials*, in gold, of 10 and 5 roubles, the rouble being a silver coin serving for the monetary unit. In consequence, many pieces of gold of 5 roubles have been struck, bearing the inscription in letters, of *five roubles*, as our Napoleons bear that of *twenty francs*. The edict of the 1st (13) July, 1839, which is the complement of that of 1810, finding the relation of the metals a little altered, gold having risen in value in Russia and throughout the world, enacted that henceforth the *half imperials*, called pieces of 5 roubles, should pass for 5 roubles and 15 *copeks*, which was found to work very well, notwithstanding the name of *five roubles* inscribed on these coins. I do not see why the same process should not be resorted to in France, and in the countries where the monetary legislation is the same; only in an inverse way to that which was practised in 1839; for gold having now fallen in value instead

* The cost would be 6 *francs*, 70 *centimes* (7s. 11d.) for a *kilogramme* of coined gold, that is of the fineness of nine-tenths, making at present 3,100 *francs* (£129. 3s.). For 325,000 *kilogrammes* of gold, which would make more than a *milliard* (£40,000,000), it would be 2,177,300 *francs*; thus for 2 *milliards* it would be a little more than 4 millions (£160,000).

of rising, it should not be by an addition being made to the value of the gold coins, but by subjecting them to a deduction, and this deduction might be more decided at a later period, when occasion arose,—which would be seen by a comparison of the market value of the two metals.

In the same way in Spain, where a succession of edicts changed the relations between the *quadruple* of gold and the silver dollar, in conformity with the variations which these two metals had undergone in their respective values. One of these edicts is dated July 17, 1779. There is, however, this difference, that in Spain the *quadruple* did not bear an inscription declaring it to be equivalent to such or such a number of dollars, the same as under the ancient regime; in France the gold coins, the *louis* and the *double-louis*, did not bear an inscription which said that they were worth 24 and 48 *livres*. The law assigned to them this value in relation to silver coins, which were either the *livre* or the multiples of the *livre*; but the law could be modified in this respect without leaving the inscription on the gold coins in contradiction with the new value which had been given them.

In a State where the currency is regulated by laws such as those which subsist in France, this inscription of the words *forty francs*, *twenty francs*, or *ten francs*, on the gold coins, or any similar inscription which might be used in another country, where, moreover, the law should have laid down the principle of a silver standard, is not of a nature to prevent the legislator from assigning to the existing gold coins a successively diminished value, and conformably at each instant to the relation between the value of gold and that of silver.

So far as I understand the monetary legislation of the Empire of Russia, the government of the Czar was perfectly warranted in altering the value of the gold imperial in roubles, in the manner I have just indicated. In the same way with France, in virtue of her monetary constitution,

the government would be doing nothing which was not in conformity with reason and justice in modifying the value in francs of her gold coins, of, say, 10, 20, and 40 *francs*, conformably with the variations in the value of gold in relation to silver, which is the metal of her monetary unit. What is, in fact, the meaning of the words *ten francs*, *twenty francs*, or *forty francs* stamped upon our pieces of gold? Do they mean that these coins shall be necessarily, and for ever taken for the sum of 10, or of 20, or of 40 francs? Assuredly not, for this interpretation would be contrary to the spirit and letter of the law. It would, in fact, be to say that gold, as well as silver, is the standard. The quality of standard implies immutability of value; it reveals itself only by this immutability, and the immutability in its turn implies the quality of standard. The words inscribed on the gold coins struck since 7th *Germinal*, year 11, have only a restricted and provisional meaning,—they express a material fact, namely, that at the moment when these pieces have been coined, the relation between the two metals was such that the weight of gold contained in the coins called 10, 20, or 40 *francs* is the equivalent of 10, 20, or 40 *francs*, that is to say of 10, 20, and 40 times 5 *grammes* of silver of nine-tenths fineness, or that, if there is a difference, it is so slight that in small transactions it is not worth notice. I say small transactions, for under the regime of the law of the 7th *Germinal*, year 11, gold ceased to figure in operations a little considerable, since it acquired an appreciable premium. People carried their gold to the money-changer, in order to pocket the premium, and, as all the world knows, they made their payments exclusively in silver.

The French legislator intended that where the variation in the value should become sufficiently sensible to destroy the equilibrium between the respective weights in gold and silver, represented by the numbers 1 and $15\frac{1}{2}$, the govern-

ment should not only have the right, but the duty of effecting a recoinage, with a view to protect the interests towards which the legislator contracted a solemn engagement in the year 11, interests perfectly respectable, and, in fact, the interest of society in the mass. This obligation is especially binding in the case, which is now imminent, in which the variation of gold has been in the direction of a fall; for, in the opposite case, that of the rise of this metal, no wrong can possibly arise. In fact, no one could then be wronged, unless it were the debtor who discharged his obligations in gold; but it is evident that the debtors would in such a case pay in silver, nothing but silver. How can it be supposed that a debtor would go in search of the dearer metal, and not make his payments in the cheaper? In fine, what payment of any importance was made in gold coins in the twenty years which preceded the discovery of the mines of California and Australia?

Now, if the legislator has the right and duty to recoin the gold currency, in order that in the piece of 20 *francs*, to speak only of this particular coin, there shall henceforth be a larger quantity of gold, he has equally the right to effect another operation, in substance identically the same, that of enacting that the piece actually called 20 *francs* shall only be worth $19\frac{1}{4}$, or $19\frac{1}{2}$, or 19, and afterwards 18, if such is the value which results from the comparison of the market price of the two metals.

Substantially, in all the systems of recoining, as in the case where we might adopt, provisionally, the plan of leaving the present gold coins to circulate, assigning to them a less value than that inscribed on their reverse, the only embarrassing question is to know who shall bear the loss representing the diminished value of the metal. For every particular coin, in the actual state of things, this loss would be very limited; but bearing in mind the enormous amount

of coinage which has taken place, the total loss would amount to a very large sum. Whatever was the expense to which it might be necessary to submit, that would be no sufficient reason why the State should shrink from its responsibility and falsify the natural meaning of the law, if it was really in equity bound to support the loss. However, on this point, it seems to me that there are sufficient reasons for maintaining that the diminution of value would fall legitimately on the private holders of the coins, instead of being made a charge upon the State. What are the grounds in virtue of which the State should be made to bear this sacrifice? The persons who maintain this opinion urge that the State in issuing these pieces, having assigned to them the value of 20 *francs*, that is to say of a hundred grammes of nine-tenths fineness, has made itself responsible, and that it is bound to redeem them on this footing, if it decides that they shall cease to circulate at their present value. This argument has but one fault, that of wanting a foundation, for the fact on which it rests does not exist. It is not the State which has issued the pieces of gold money any more than the pieces of silver; it is by private individuals that the emission has been made. In France, the part of the State, with regard to the coining of money, reduces itself to a simple surveillance. It certifies, with solemn forms, and the solemnity is here well-placed, that the coins which issue from the scales possess the weight and fineness intended by the law. The directors of the mint undertake to work by contract, according to a tariff which the government has settled, for private individuals, who, possessing gold and silver, wish to convert those metals into coins. They do not manufacture on account of the State. Under the ancient regime, when *Louis le Bel* committed scandalous frauds on the currency, the mints worked on account of the king. It may have always been so whilst the sovereign

appropriated to himself, under the name of *seignorage*, or any other name, an exorbitant profit upon the coinage. On the contrary, it is now a settled principle that the State should gain nothing by the mint, and that the charge to be levied on the gold and silver brought to be coined should be as moderate as possible, so as to represent merely the expenses and interest of capital.* So true is this, that we see in France that, in proportion as the process of coining is perfected, the tariff of charges at the mint diminishes. There are even States where, as in England, the public treasury supports the expenses of coining. Under such circumstances, can there be any ground for saying that in France, the State has guaranteed anything to the public, on the subject of the gold coins, beyond the exactness of the weight and fineness decreed by the law? And if it be settled that the law, both in spirit and letter, decides that the gold coins remain the equivalent of 20 or of 40 francs, in payments, only so long as the respective value of the two precious metals shall continue to be defined by the relation of 1 to $15\frac{1}{2}$, would those individuals who should not take advantage of their pretended ignorance of the law, be warranted in showing their astonishment at learning, some fine day, that the disc of gold which they have in their pocket, which had been previously worth 20 francs, was, henceforth, worth only $19\frac{1}{4}$ or perhaps $19\frac{1}{2}$?

The argument attempted to be drawn from a pretended ignorance of the law, with a view to relieve the holders of coins from the charge which will fall on them in case of the recoinage of which we are speaking, cannot be received; it is a matter of right, well determined: but here there can be no pretext for invoking it, for the law of the year 11 could

* In reality, the directors of the mints come to an agreement with the capitalists who carry on the commerce of the precious metals, and their real benefit consists in the profits inherent in this commerce.

not be represented as an improvisation, something dispatched privately, without previous warning. Far from it, this law, finally drawn up with much deliberation, in the silence, it is true, in which the legislative mechanism under the Consulate worked, had been preceded, and announced by a great number of discussions, of projects of laws, of laws even, ever since the year 1789. Under the *Constituante*, the voice of Mirabeau thundered forth the fundamental conditions of this law, and from this moment to the year 11, during fourteen consecutive years, the most remarkable unanimity of opinion was displayed in favour of the general ideas which were definitively embodied in the law of the year 11. It was difficult to be more thoroughly warned than was the public in this affair.

To this opinion, that the State would not have to indemnify any one in changing the gold currency, two precedents are opposed, drawn from the practice of two governments distinguished for their intelligence, their integrity, and their knowledge of business. Belgium and Holland have modified their legislation on the subject of their gold currency, and, in this operation, the diminution of value which the gold coins have undergone, in consequence of the fall of the metal, has been placed to the charge of the State. In Belgium and in Holland, the State, in withdrawing from the gold coins the legal tender, offered to the holders the nominal value at which they had previously passed, in silver. We are asked whether this is not a reason why the State should do the same in France.

The example of Belgium, which had a monetary legislation analogous to that of France, cannot, however, have here much weight. Belgium had no gold coinage until 1847. A law then authorised the fabrication of national gold pieces of 25 *francs*, and of 10 *francs*; but the issue was expressly limited by the law to 20 millions of *francs* (£800,000), and

it only attained to 14,646,025 *francs* (£585,841).^{*} This money was only an experimental state in Belgium when it was thought that it might be proper to deprive it of its legal attribute. The administration received, by the law of 28th December, 1850, powers to this effect, which it might use when it should judge the circumstances opportune. It only availed itself of the law in 1854 (royal edict of the 15th August). At this time the depreciation of gold in comparison with silver was very trivial. In engaging to pay the nominal value of the gold pieces in silver currency, the State incurred no risk of any serious loss. In fact, this restitution has cost it nothing. The *National Bank* and the *Société Générale* have supported,—each the moiety,—the moderate loss to which the operation has given rise.[†] By this proceeding, the Belgian government contrived to parry beforehand, without in the least compromising its finances, the objections which discussions on such matters will raise in a parliament. I do not pretend that Belgium has done wrong; but it does not seem to me that what she has done should be a precedent to bind France.

In Holland, the question of reimbursement in silver presented greater difficulties, for there had been coined a much larger mass of gold money. The pieces of 5 and 10 florins formed a total of 172,583,995 florins, or 370 millions of *francs*‡ (£14,800,000). In proportion to the population it is

* When these gold pieces were demonetised, only 11,987,300 *francs* (£479,692) were presented for payment.

† It appears from the published account of the *National Bank* that its loss by this transaction amounted to 140,032 *francs*, 67 *centimes* (£5,601). It found a compensation in the use of the funds which the treasury had left in its charge.

‡ It is curious that less than a third should have been presented for reimbursement, exactly 49,790,970 florins. On this subject, however, it must be borne in mind, that of the sum of about 173 millions of florins which had been coined, 96,490,590 had been struck in Brussels.

as 5 *milliards* for France (£200,000,000). Nevertheless, the Dutch government did not hesitate to assume the charge for reimbursement in silver. But was the legislation of Holland the same as our own? Did not the Dutch law admit of the two standards? If it did, the State was bound in honesty by an engagement, tacit at least, to barter the coins made of one of these metals for a value, nominally equal, in coins of the other, whenever it should decide to modify its monetary system, by demonetising its gold currency. There is nothing in that which is applicable to France.

I have said that the legislation of Holland recognised the two standards. The text of the law of the 28th September, 1816, which was the fundamental monetary act of the Netherlands, warrants a doubt on this point, and it may be said that that law did not solve the question of the double or single standard; the question was never mentioned,—but that was itself sufficient to solve it. If it had been intended that there should be only one standard, which would have been regarded as an innovation upon the old usages which they were reviving, the *exposé des motifs* would have made it known; but there is nothing said, absolutely, either in that document, or in the preamble at the head of the act: moreover, the Dutch legislator himself, of 1816, the period in question, appears always to have thought that the country was under the regime of the double standard. The text of several laws proves it. We may refer, for example, to the preamble of the law of the 26th November, 1847.

Another difference, worthy of being cited, between the monetary legislation of the Dutch and that of France, consists in this, that in Holland the gold pieces of 5 and of 10 florins, which are those that the government withdrew from circulation, paying for them in silver, florin for florin, had been issued by itself and on its own responsibility. It had expressly reserved for itself the monopoly of this issue, and

it was only just that it should support all the risks.* The part played at the mint by the French government is, as we have seen, very different from this.

Upon the point under discussion, that is as to the party on whom should fall the expense of a recoinage, or the loss on the value of a piece of gold, it may be here remarked that the case had been already foreseen in some of those documents which served for a preparation for the law of 7 *Germinial*, year 11, particularly in the first report of Gaudin to the consuls. Now, on the course to be taken, Gaudin never hesitates; he says in express terms—"The expense shall be borne by private individuals." It is a passage in his report which I have repeatedly quoted in the course of this work. Nothing occurred to impair the force of the words of Gaudin in the course of the long preparation which the law underwent; and this, if I mistake not, is an argument of some weight.

It must not be supposed that, in the present state of things, the loss would be serious for the bulk of individuals, even of the rich. At this moment the depreciation of gold, in comparison with silver, is very small; and consequently for a sum of 1,000 or 2,000 *francs*, which is as much as a person in easy circumstances has ordinarily in hand, with very few exceptions, the loss, supposing it to be 1 per cent,†

* The article 11 of the fundamental law on the currency of Holland, of the 28th September, 1816, runs thus:—"The coins for the convenience of commerce shall only be fabricated for the account of individuals. The pieces of 1 florin and of 3 florins may also be fabricated on account of individuals; but the pieces of gold of 10 florins, the pieces of fractional parts of the florin, and coins of copper, shall not, absolutely, be fabricated for the account of individuals, but only for the account and by order of the government." Later, when it was decided to coin pieces of gold of 5 florins, they were subjected to the same regime as those of 10.

† In Belgium, where, in consequence of the new legislation on the currency, the phenomenon of the variations of value between the two metals is more apparent than with us, the 20 *franc* gold pieces have never lost much, in comparison with silver; at the outside $\frac{1}{2}$ per cent: they are received at par

would be 10 or 20 *francs*; let us double it, and still it is insignificant compared with the fortunes of those persons. Besides, to those who complained, there would be the right to reply that the government imposes no sacrifice on them, that it limits itself to the putting an end to a fiction and a confusion prejudicial to the public interest, and that, if they find themselves injured, it arises out of the nature of things exactly the same as when a fall takes place in wheat, wine, cattle, or cotton goods.

But one word more. Even if we should be of opinion that it is the State which ought to bear the diminution of value which the gold coins have now sustained, that would be no reason for not proceeding with the change. Imperious motives, economical and political, command us to take a decided course. We should prepare for ourselves much future regret, if we were longer to delay. The expense of a recoinage, made even at the cost of the State, is as nothing compared with the losses to which we shall subject ourselves if we do not hasten to act in accordance with sound principles, and to the prescriptions of the law faithfully interpreted. Nevertheless, however small may be the chance one has in France, where he sustains the public interest against the interests of individuals, I cannot refrain from repeating that from the terms of the documents which define the sense of the law, and according to the text, reasonably interpreted, of the law itself, the State is not bound to offer any indemnity to the holders of the gold coins.

in the hotels, and in the large shops. It is probable, however, that if France abolished the legal relation of 1 to $15\frac{1}{2}$ between the two precious metals, the fall in gold would be more decided, because France now plays the part, at her own expense, as I have already shown, of a parachute for gold. So long as she offers to the bullion merchants a market where they can barter their gold for silver on the footing of 1 against $15\frac{1}{2}$, the value of gold in its relation to silver cannot, in Europe, deviate much from this relation. The deviation will only become more decided from the moment when France shall have been exhausted of her silver, unless she shall have previously renounced that fixation, henceforth arbitrary.

If the legislator were now to adopt the conservative measures which have been indicated above, and to which he is led by a fair interpretation of existing legislation, we are warranted in believing that everything would pass without shock, and that the instrument of exchanges would remain in the condition of abundance required for the ordinary extent of our transactions. There is, in fact, still a good deal of silver in the departments. At the height of the extraordinary demand for silver which has, of late years, manifested itself for India and China, but which has slackened in 1858, Belgium and Holland, which have now no legal currency but silver, have experienced no want of metallic money, and this is a double experience which is convincing. Then we must not forget that, with the combination which I have quoted from the proposition of the Council of the *Five Hundred*, modified by the Committee of the *Ancients*, gold would not cease to circulate in France in large proportions. There is no visible reason why under this regime, much less absolute than that which has been adopted in Belgium and in Holland, gold should retire from the circulation. Everything, on the contrary, leads to the belief that it would remain to the extent to which we should require it. With respect to the precious metals, that which would be thenceforth interrupted, and it would be so to the great advantage of the public, is the current, so violent for several years, which replaces, in the circulation of France, the silver money by a gold currency, and which, if it be not arrested, will overturn the monetary system which the legislature of France, regenerated by the Revolution, flattered itself it had firmly established upon immutable foundations.

CHAPTER III.

THE MEASURE HERE RECOMMENDED IS A NECESSARY COMPLEMENT OF THE LAW OF GERMINAL, YEAR XI.

I BEG the reader to observe that the combination which has been discussed in the preceding chapter, relative to a gold currency, ought not to be represented as, in any degree, the negation of the law of the year 11. It is, on the contrary, its complement, the necessity of which has been demonstrated by experience. The object which the minister of finance, Gaudin, had in view, and which the legislator decided resolutely to carry out, was to prevent all dispute between private individuals relative to the value of a gold currency in *francs*, or, in other words, in pieces of silver, since the law has defined the *franc* to be a weight of silver agreed upon once for all. The means employed was a legislative fixation, which should be conformable to the commercial value of the two metals, in their relation the one to the other. The adversaries of Gaudin, as may be seen by the reports of Berenger, vainly objected that this fixation by the law appeared superfluous, and cited some States where gold circulated simultaneously with silver without difficulty, without any intervention from the legislative or administrative authority. The majority of the Council of State, and afterwards the Tribunal of the Legislative Body, both of which deliberated very maturely, thought that, to insure the parallel circulation of gold and silver coins, a fixation by law of the relation existing between the two metals was the best course to follow.

It was well known, and Gaudin knew it perfectly, as the reports emanating from him prove, that the relation of the

value of the two metals is mobile; it has not ceased to vary more or less since the origin of civilisation. It was well understood that if gold, for example, fall in value in relation to silver, so as to be no longer worth fifteen and a half times its weight of that metal, the proportion recognised in the year 11, the consequence is, that it will become superabundant in the circulation, and that silver, on the contrary, will gradually disappear; since the natural tendency of debtors can never fail to be, to make their payments with the cheapest commodity: just as in the case in which gold should acquire a superior value to that which it possessed previously, gold would disappear. Phenomena of this kind have been observable in all times and in all countries. Gold and silver, like all other commodities, shun the markets where they are not taken for their full value, and flow towards those where they meet with better terms; consequently, it was well understood, and it is intimated in twenty passages of the documents which served as the preparation for the law, as well as in the *exposé des motifs*, that whenever a reciprocal change between the two metals should be manifested,* the gold currency should undergo a modification.

But the elements were wanting necessary for determining the extent of the change of the reciprocal value between the two metals, which might derange the monetary mechanism, as it was then agreed upon, and which might be of a nature to prevent the parallel circulation of gold and silver coins. It was not then thought necessary to say,—there shall be a recoinage whenever the relation of 1 to 15½, which now exists between the two metals in the market, and which is for the present given as the basis of the fabrication of the gold coinage, shall have been modified one per cent,

* I have already remarked above that the fact resulted from the very context of the law.

or two, or three, or more or less. It was understood, and in that we have a proof of the good sense which is one of the qualities of the legislature, that it was left to experience to decide. It was agreed that they should wait until the signal was given by *events*: the word is Gaudin's, as may be seen in his first report. He trusted to the intelligence of future governments, to their good faith, and public spirit, for comprehending the language of events.

It is thus that it was left undetermined, in the system of the law of the year 11, by any positive sign, when the day would come for recoinng the gold pieces, and changing the proportion of metal which corresponds with a *franc*. It is this indeterminateness which furnishes the excuse, or pretext, for the tolerance with which gold is now treated, as if it continued to be worth $15\frac{1}{2}$ times its weight in silver,—a tolerance which falsifies our monetary system, and which threatens to open the door to the inconvenience and injustice which I have attempted to explain.

The measure which has been indicated in the preceding chapter has for its object to put an end to this deplorable indeterminateness, while still remaining faithful to the idea adopted by the legislator in the year 11,—that there should always be a legal fixation of the relative value of gold and silver, but also never forgetting the engagement which was at the same time entered into by the legislator when he said, in his *exposé des motifs*, that the monetary system of France would henceforth offer “a guarantee for the fulfilment of commercial transactions and the conservation of property which we do not see” (they could say so in the year 11) “in the monetary legislation of any other people.”

CHAPTER IV.

ON SOME INCONVENIENCES INHERENT IN THE COMBINATION,
RESPECTING A GOLD CURRENCY, RECOMMENDED IN THIS
WORK.

THE plans recommended in this work, respecting a gold currency, are they absolutely free from all inconveniences? I do not pretend that they are. It would result that from the fact that the cashier had in his charge gold coins which he was justified, on the 31st December, in considering worth a certain sum, he would, without having touched, or added to or deducted from them, on the 1st January, when the periodical revision of the tariff took place, possess the same gold coins in true relation with silver. What is said of cashiers would also be true of every private individual having in his house or pocket any gold coin. In what concerns the receivers of the public revenues the objection is serious. It seems, in fact, that they would be placed in a false position, and every six months (I assume that the revision would be half-yearly) be exposed to a clear loss, or find themselves in the way of making an unmerited profit. This difficulty, however, is not insurmountable. Would it not suffice, for example, if the cashiers were to state the amount which they had separately in gold and silver coins? It would also be well if they distinguished the sums which they held in bank notes. Such a task need not be very difficult.

With regard to the public in general, it would not be impossible to prevent private interests from suffering a serious loss at the end of each six months, in consequence of the depreciation of the gold which each individual might have on hand. In fact, everybody might so arrange as only

to have just so much as he pleased in his possession. This rule might be easily observed, if, adopting an idea which has been thrown out, the law were to limit to a certain maximum, such as the sum of a thousand francs, the amount which the creditor should be forced to receive in gold ; so that in private transactions, beyond this sum, it should be left to the voluntary agreement of parties to decide the nature of the money in which payment should be made. But it is a clause which would give rise to great difficulties in regard to the State, and to certain large establishments such as the bank.

In all this I do not trouble myself about those individuals who should have hoarded large sums to keep them indefinitely concealed. If, at last, after a long lapse of time, they experienced a great loss, they would have only themselves to blame.

In fine, we must not forget that the evil of which, at this moment, we are seeking the remedy,—that is, the loss which the holder of gold specie might in spite of himself encounter, in consequence of the fall of that metal in the course of six months, would not, in all probability, be anything considerable. In fact, the case we are examining is rather imaginary than real. It is one of those hypotheses which we discuss in books when we are in the mood for argumentation, but to which the administrator and statesman attach but little importance.

Let us, however, acknowledge, without hesitation, that the system which is here submitted to the appreciation of the public, and which is destined to maintain the parallel circulation of the two metals, without violating the sacred principle of a single standard, will not insure at each instant an absolute compensation or a mathematical equilibrium. It is a mechanism which in its movement may rub a little. But, I repeat, the question is not whether it be perfect. It is rather,—what is the combination which deviates the least

from perfection, and which offers the fewest inconveniences? When once we have proposed and accepted a plan for maintaining, parallel with each other, the two metals in circulation, still remaining faithful to the principles which prescribe but one standard, and always respecting the law and the precedents which very opportunely in France assign this attribute to silver, the only question is,—are the accidental derangements which might affect the system, such as ought to frighten us, and are they comparable with the evil effects which we have reason to expect from the other combinations? There is the question, the whole question; and thus stated, I think it will be answered in the negative. In any case, the worst of all systems is that of which France has offered the spectacle for several years, not in the name of the law, but in opposition to the letter and text of legislation, and in consequence of the inattention of the public authorities,—I mean that in which we see affairs proceeding as if the two metals were placed on the same footing in the currency, and were one as well as the other invested with the dignity of the standard.

I am acquainted with some intelligent persons who are of opinion that the best system would be that which has prevailed in Belgium, in Holland, in the Germanic Confederation, and in Naples, the principle of which is to leave absolutely to commerce the care of fixing the value of the gold coins in relation to silver recognised as the standard. The combination here recommended, has, in relation to the above plan, the fault of a certain degree of complication; but having regard to the habits and manners of life of the French public, I think it preferable. It is more in conformity with the traditions established by the law of the year 11, and with the object of that law,—to establish the parallel circulation of the two precious metals, while starting from the principle that silver is the standard. Doubtless, the system

which I shall call Dutch, on account of the nation which was the first, in these later times, to put it in practice, presents itself with the authority of several governments who have adopted it after mature deliberation, and to whose enlightenment I render homage. Such a preference is an argument of great weight. This system subsists, and is in operation in several States which have adopted it to the satisfaction of their populations. But it must also be admitted that is a weighty argument in favour of the combination which I have developed,—that it is the continuation of our antecedents, at the same time that it is in its whole extent desirable as consistent with scientific principles. Moreover, if experience should develop any unforeseen and grave inconvenience, we should always be able to revert to the plan which has been preferred by the above-named government.

CHAPTER V.

OF A PLAN RECOMMENDED FOR MAINTAINING THE PARALLEL CIRCULATION OF SILVER AND GOLD.

M. GUSTAVE DE MOLINARI, the distinguished professor of political economy, at the *Musée Royal de l' Industrie*, in Belgium, and at the *Institut Supérieur du Commerce*, at Antwerp, has recommended a monetary mechanism calculated to maintain in France the double circulation of silver and gold, whilst recognising in silver the sole quality of standard. To assure to gold, in all the latitude possible, the function of auxiliary which the law of the year 11 has assigned to it, and to prevent at the same time the

possibility of its being surpassed, M. de Molinari would have gold coins containing a quantity of metal sensibly inferior to that which corresponds with the value of gold in its relation to silver. This would, according to him, be giving to gold coins the character of tokens, in the same way as in England is managed with silver. In this system, the French government would reserve to itself the sole right to issue gold coins, as the English government does in the case of silver ; and, as the circulation of France is becoming saturated with gold, it would be necessary, provisionally at least, to stop its fabrication. Besides, to give to the holders of the gold currency a guarantee against excessive issues, to assure in some degree the value of this auxiliary money, made from a metal subject in our day to a depreciation, it would be necessary to make it always payable on demand, in silver, like bank notes. These conditions complied with, the value of the gold currency would be as stable as that of the silver on which it was based, and, as gold is more convenient in use than silver in the generality of transactions, it would be resorted to in preference. The gold actually in circulation would not be withdrawn to be exchanged for silver, any more than are the bank notes, and the monetary regime of France would unite the security of the system of Holland and Belgium, which is based on silver, with the convenience of the English system, which rests upon gold.*

This system is certainly somewhat seducing ; at first sight, it seems calculated to remove all difficulty : we should have, for example, gold coins of the weight of 5 *grammes* of nine-tenths fineness, to which would be assigned the value of 25 *francs*, notably superior to their real value. Owing to

* This description is extracted from the *Economiste Belge*, of the 10th February, 1857, where M. de Molinari has developed his idea.

the power of converting them at will into pieces of silver of the effective value of 25 *francs*, there would be a guarantee that they would circulate with the public for the nominal value which the legislature had assigned to them, and for the excess even of that value relatively to the real value, and thus the monetary mechanism in which these coins should figure would seem to be for ever beyond the reach of the perturbations which the fall in gold can occasion.

Let us in the first place offer an observation on the name which M. de Molinari gives to the operation which he recommends. Would it really be the issue of a gold *token*? In the accurate sense of words which could never escape a person so highly versed in economical questions, the denomination of *token* is not that which is appropriate in the present case. The function of a token is, in fact, to be admitted into payments only to make up an amount. In France, the token, which is in bronze, is limited to five *francs*; in England, the silver token is limited to payments of two pounds sterling, or about fifty francs. The pieces of gold of M. de Molinari having no such limit, they could not be considered as tokens. What would they be then? Signs of credit like bank notes, with this difference, considerable however, that the substance instead of being of paper would consist of the most precious of the metals. But this difference even is not perhaps to the advantage of the system: if we are to have bank notes, it is more simple and advantageous to make them of paper.

M. de Molinari has felt the analogy between his gold counters and the bank note, and he has formally recognised the necessity of giving them the support of a voluntary exchange for silver money. The guarantee is, undoubtedly, valuable, but it is also one of the weak sides of the system, in so far as it would be an expense. It would be necessary to establish special treasuries, with a reserve of specie in

silver sufficient for the purpose, or it would be necessary for certain public establishments to take upon themselves the obligation of holding always for this purpose a considerable sum in five-franc pieces, which would, in point of expense, amount to the same thing, and besides would be contrary to the rules established by the French administration for the good order and security of the finances of the State.

I repeat the opinion just expressed; if it be a question of putting into circulation signs of credit, of twenty-five francs, it were better that they should be in paper. In fact, an instrument of exchange, composed of pieces of silver and of bank notes of 25 francs, would be acceptable, except for the circumstances which I am about to note.

Germany has for forty years carried on its affairs with an instrument of exchanges, composed almost exclusively of pieces of silver, *thalers* or *florins*, and of bank notes or notes of the State, both of small amount. Gold figures there only as an accessory of small importance and almost accidental.

In France, the law of 1857, which prolonged the privilege of the Bank of France, allows the circulation of notes of 50 francs; with notes of this denomination and with silver money, the instrument of exchanges would be complete without anything else.

It must not be concealed that bank notes of 25 or of 50 francs (£1 or £2) present some inconveniences, and expose the public interest to some errors. Notes under five pounds sterling have been prohibited in the United Kingdom, excepting in Scotland, where the smallest note authorised by law is one pound sterling. What are the grounds on which a great number of men versed in affairs, and familiar with economical science, have pronounced against these small notes? It is primarily the danger of forgery: if these small notes are left to circulate after being soiled and torn, there is reason to fear that they will be imitated. Then, there is

also the possibility of a panic which might seize the holders of small notes more easily than the richer and more intelligent classes, to whose use the notes of £5 are chiefly restricted. The effect of this panic might be to lead a mass of individuals to precipitate themselves upon the banks to obtain the immediate payment of their notes, and then these establishments might be obliged to suspend their payments.

Now, these two dangers would also subsist to a sufficiently marked degree with the gold token of M. de Molinari, at least from the moment that it should offer, very decidedly, one of the distinctive characters of the token, of having a nominal value notably superior to its intrinsic value. If there is a violent temptation to coin paper money, in imitation of the signs generally accepted by the public, such as the real bank notes, we have only to wait until the dishonest speculation of issuing gold pieces passing for 25 francs, and being only worth 15, shall become also profitable. It would be even more easy to fabricate these counters than to forge the bank notes. The imitation of these latter is far from easy, and might be rendered very difficult. On the contrary, the reproduction of gold coins, of which the impression should have been more or less defaced by the circulation, would be a work of great facility. It would be a mere joke for the manufacturers of livery buttons furnished with such machinery as is now found in workshops of that kind in certain towns like Birmingham.

The danger of a panic, which might lead the mass of the population to come and demand payment for these counters of gold, in their nominal amount of silver, would be almost as great as with the small bank notes, on the hypothesis of which I am speaking of a great divergence between the nominal and real value.

It is true that we should escape from these two perils by imposing the rule of having, between the nominal and the

real value, only a deviation of five or at the utmost of ten per cent. But then the combination would become burdensome on account of the sum which it would be necessary to keep in hand, in silver money, to meet the demand for payments. Suppose an issue of a *milliard* of francs (£40,000,000) in gold tokens: if the divergence is $7\frac{1}{2}$ per cent, that will be a saving of 75 millions (£3,000,000) in the capital required to furnish the instrument of exchanges; but if the public treasuries destined to guarantee the payment on demand absorb for this purpose a reserve of 100 millions in silver money, the operation ends in a loss.

CHAPTER VI.

OF THE RESOLUTIONS OF A COMMISSION APPOINTED BY THE MINISTER OF FINANCE IN MDCCCLVII.

AFTER the discovery of the mines of California, and before that of the auriferous deposits of Australia, a commission had been appointed by the French government to examine into the probable effects of the great and rapid arrivals of gold consequent on the operations in the valleys of the Sacramento and the San Joaquin. This commission came to no conclusion; the indications of experience were then too incomplete. The facts having been afterwards much strengthened, a new commission was named the 7th Feb., 1857, by the minister of finance.

The commission received instructions "to inquire into the principal causes of the monetary situation, to investigate the various questions which arise out of it, and to report its opinion on the measures called for by the general interests

of the country." In these terms, the outline traced for the labours of the commission was extensive. In February, 1858, it had finished its labours, according to a more restricted plan which it had traced for itself, or, to speak more correctly, which had been suggested to it, and which it accepted, and in its name a report was presented, which it is impossible to pass by in silence.

In the programme of which I have just spoken, as having been received and accepted, California and Australia were not upon the first plan; the fact of the exportation of silver from France was the phenomenon to which the greatest importance was attached, and everything was made subordinate to it. Australia and California are not even mentioned; no direct allusion is made to them.*

* The following was the programme:

1st Question.—What is, in fact, the importance of the exportation of silver?

2nd Question.—To what cause, direct or indirect, must this fact be attributed?

The premium of silver over gold. Its degree, its variability.

The natural movement of our international commerce with the countries which prefer silver.

Private and direct speculation of the money-changers and refiners.

What part belongs to each of these causes?

3rd Question.—What may be, in a general point of view, the influence for good or evil of the destruction or the exportation of the silver currency?

What good can arise beyond the private benefit which may be derived by the money-changers and refiners?

What harm can ensue:

To the Bank, and in consequence to commerce, by the weakening of the reserves of specie?

To the State, in obliging it to interfere at its cost, to replace constantly with new coins those which the refiners had melted?

To commerce, in depriving it, as might happen very speedily, of a description of money which is very necessary to it in its relations with other countries; or in compelling it to pay for it the premium which the money-changers shall have gained?

4th Question.—In face of the fact and its consequences, is there nothing for the government to do?

If so, what steps ought it to take?

Many have been suggested:

1. To demonetise gold, and bring it to the state of simple merchandise, excepting the fixing officially its value at periodical epochs;

2. To transform silver money into a conventional currency, by giving it a nominal value, superior to its real value, as in England;

3. To transform the silver money, by giving it a nominal value, equal to

Thus the point of departure for the deliberations of the commission was not, perhaps, the best that could have been chosen. As to its conclusions, they are of a nature to astonish those who are conversant with economical questions; here is, in fact, the substance of the report:—The principal cause of the disturbance witnessed for several years in the monetary system of France is to be traced to the extraordinary demand for silver for exportation to the remote East. This unusual demand has caused a rise in the value of silver as compared with other commodities. As for gold,—it does not seem to have fallen, notwithstanding the large production of California and Australia. The best mode of remedying the difficulty which we encounter would be to maintain, compulsorily in France, the relation of 1 to 15½, established, or rather confirmed, by the legislation of the year 11. To prevent the foreign market from exercising in this respect any influence on the market of France, it is only necessary to put a duty on the exportation of silver, and to establish penalties against the heads of establishments who engage in or connive at the trade. Thus the conclusion of the commission is that a duty should be laid on the exportation of silver. The commission even adds that it

its actual real value, that is, by changing the relation established by law between gold and silver;

4. To prohibit the exportation of silver;
5. To raise the duty on the export of silver;
6. To lower the recognised weight and fineness;

7. To attack directly the evil in its material and immediate source by a law against the destruction of money, assuming that the ancient laws are no longer in force; and with this view to prohibit the selecting and purchasing of coins at a premium for the purpose of melting.

It will be well for the commission to examine successively these different questions, without prejudice to those which may arise out of the inquiry.

To make a subsidiary inquiry whether the State ought not to reserve to itself the exclusive right of withdrawing from the circulation the coins bearing the inscription of Charles X., and of Napoleon I., which contain a quantity of gold, the melting of which constitutes the chief benefit to the refiners. What measures should be taken to carry out this object?

should be a *high* duty. Moreover, the better to impede exportation, the selecting or assorting of pieces of money shall be an act punishable under the penal law.

Now, if there be anything confirmed by history, it is that the efforts of governments are powerless to regulate the value of gold and silver in relation to other commodities, or to one another, and that they are equally so to compel the precious metals to remain in the interior of a State, should commerce give the impulse to their exportation. This twofold observation is a truism which one regrets to have to revive. If there be in political economy anything universally acknowledged, and with which intelligent governments are in accord, it is that the precious metals should be treated as merchandise, and left to the free action of commerce, including, of course, the liberty of melting and all that appertains to it. The conclusion of the commission is right in the teeth of these well-accredited doctrines. On the subject of the currency, we should be thus embarking with all sails set upon the waters of the ancient regime, when other civilised countries, led by the voice and example of France, had agreed to follow another course.

It may then be believed, on its own simple announcement, that the unanimous opinion of competent men will be against its recommendations. They rest, in fact, on ideas which, thank Heaven, time has disposed of.

In fine, the commission proceeded, as will be seen, in a manner to deprive of all authority its chief proposal for preventing the efflux of silver by means of a duty on exportation. Before coming to that vote, it took the laudable course of consulting the most eminent and enlightened members of the commercial and banking interests, eight of whom, of the highest standing, were summoned to its presence. They were examined separately upon this special subject, and the question was presented to them in every

form. The reiterated testimony of these eight persons was unanimous : they persisted in repelling the idea of a duty on exportation. Under these circumstances, the decision of the commission is presented in not very favourable colours. When the commission decided to call before it, one after the other, eight important persons, in order to consult them in detail on a given subject, that is, the propriety of stopping, by a resort to the material obstacle of a custom-house, the export of silver, it was because it felt the necessity of obtaining further enlightenment. But, then, how could it decide against the unanimous and very decided opinion of those eight counsellors whom it had chosen as the most competent to edify it ?

In the history of the European currencies, the commission would have found, at an epoch not very remote from our own time, a precedent which seemed almost expressly made for it, so well was it adapted to the circumstances in which it deliberated, and especially to the position of the very question which it had accepted.

Towards the commencement of the eighteenth century, the monetary system of England underwent a perturbation, of which the most apparent phenomenon was the same as has been repeated in France since the discovery of the mines of California and Australia : the silver was either sent abroad in coins, or was cast into the crucible to be exported in bars, and gold took its place in the circulation. The British government, alive to this state of things, asked the advice of the great Newton, who was then director of the Mint, and who brought to the performance of the duties of his office the same care, the same acuteness in the observation of facts, and the same earnest spirit of analysis to which he owed, in the progress of science, the admirable discoveries which have immortalised his name. To the question which was submitted to him, the 12th August, 1717, to determine

the causes of the exportation of silver, and to indicate a mode of putting an end to it, Newton replied, the 21st September, in terms which I will shortly explain.

At that time, custom-house duties were used and abused for all sorts of purposes, and every kind of restriction, besides, was placed on the industry of the country. At the same time, the extension and exaggeration of the penal laws were expedients to which authority eagerly resorted, and which were very convenient, because they relieved them from the necessity of maturely studying the questions which presented themselves, and of comprehending the origin and nature of things. Newton would have, therefore, been excusable if he had recommended more rigorous acts against the exportation of silver, and the application of a severe penalty directed against tokens and light weights. But measures of this kind were not those towards which a man like Newton directed his mind, and in England already more intelligent traditions had established themselves, more care for public opinion, and more respect for human liberty, in its relations with industry, as well as with the other aspects of civilised life. Thus, then, proceeded Newton:—

After having passed in review the value of gold and silver in the different States, and having shown that in England the legal relation gave too much to gold to the detriment of silver, he argued in the following manner:—If silver leaves the shores of England in crowns, or in ingots, the produce of coins remelted, and gives place to gold, it is because the value which the monetary legislation assigns to it, in relation to gold, is not correct. The law supposes, in fact, that the relation between gold and silver is that of 1 to a little more than $15\frac{1}{2}$,* whilst in the general market of Europe it

* Newton says that 1 pound, troy weight, of fine gold is worth legally 15 pounds, 6 ounces, 17 dwt., and 5 grains of silver. The pound troy is only 12 ounces.

is barely 1 to 15.* That, let the legal relation between gold and silver be re-established upon the true basis, and by that act we shall have destroyed the temptation to export from England silver in preference to gold. To effect this, nothing more need be done than to withdraw 10 or 12 pennyweights from the value assigned to the guinea in silver money. For greater prudence, Newton advised the reduction to be made in two operations, and to commence by an abatement of 6 pennyweights.†

The note of Newton is a model of logic and precision. We recognise in it that firmness and justness of mind which laid hold of the foundation of questions, threw aside accessories and extraneous or indifferent objects, and went straight to the end in view. The reasoning of his note applies word for word to the problem which Our Commission had to solve. Here is in effect what may be said in our day:—For several years, silver has been leaving the shores of France, in crowns, or in ingots, the produce of coins remelted, and giving place to gold, because the value which the monetary laws assign to it in relation to gold is not correct. The law supposes, in fact, that the relation between gold and silver is that of 1 to 15½, whilst in the general market of Europe it is sensibly less. Let the legal relation between gold and silver be re-established upon the true basis, and by that act we shall have destroyed the temptation to export from France silver in preference to gold. To effect this, nothing more need be done than to withdraw from the value attributed to pieces of gold in silver money a given quota, certain to retouch periodically this relation, so that it shall always be in

* Newton says 14½ to 15.

† This report of Newton has been reprinted in a volume of documents upon the currency, which has been published by the London Political Economy Club, to which I have previously referred.—*Select Tracts on Money*, p. 274.

harmony with the real state of things. I put aside here the question whether we should render the monetary system of France more conformable to principle, and whether the application of this mechanism to the gold coins would not be better effected by replacing the quantities of metal which constitute the coins in usage, by others which contained a round number of *grammes*, of five or ten, for example.

It is much to be regretted that a commission which, deliberating in 1858, at Paris, the centre of European intelligence, and the metropolis of the civilised world, as we are in the habit of calling it, should have refused to adopt the opinion of so great an authority as Newton, so competent in the matter,—an opinion put forth under circumstances from which what is passing in our day in France respecting silver money might have been borrowed, and which was, moreover, sanctioned forthwith by government at the instance of parliament.* It is difficult to conceive how, repudiating such an authority, this commission should have permitted itself to draw its inspiration from the edicts of the ancient regime upon money, which are monuments of ignorance and despotism.

* The reduction of six pennyweights per guinea was made before the end even of the year 1717, by royal proclamation.

CHAPTER VII.

OF VARIOUS ACTS WHICH THE LEGISLATION OF THE ANCIENT REGIME UPON MONEY TREATED AS CRIMES, AND WITH REGARD TO WHICH SOME PERSONS OF OUR DAY PROPOSE TO ESTABLISH PENALTIES. — SELECTING, AND MELTING ; TRADE IN COINS ; EXPORTATION.

IN the course of this work I have already offered some explanations of the various operations on the currency which the ancient regime punished with the utmost rigour. This scaffolding of penal laws, pronouncing almost in every article the pain of death or the galleys, accompanied with confiscation and fines, generally of enormous amount, was overturned, after the Revolution, by the precise dispositions of the laws and ordonnances, or implicitly by the effect of the new direction, eminently conformable to reason, as well as to the experience of ages, which the legislation upon money has taken since 1789.

In the opinion of the moderns,—an opinion which has passed into the laws of the great civilised States, gold and silver are commodities which, in exchanges, pass for the value which belongs to them. The trade in these metals is free, like that of other merchandise. A piece of coined money is a certified ingot, as to its weight and fineness,—and the certificate consists in the impressions which it has received. Between this sort of ingot and an ordinary ingot, the difference of value is restricted to the expense which attends the affixing of the certificate, including the previous operation by which the metal is brought to the legal fineness, and these expenses are very trifling. Not only is the trade in the precious metals, whether coined or in ingots,

perfectly free in the interior of States; but it has been acknowledged even in countries which have maintained a very restrictive system of international commerce—France is in this predicament,—that the importation and exportation of gold and silver, both in coins and ingots, ought to be perfectly free. Inasmuch as the precious metals, whether coined or not, are merchandise, it follows that the private individual who has received a piece of money can do with it what he will, and, consequently, can melt it. The only use of it which is interdicted to him is to put it in circulation again after having diminished its weight by “sweating,” or otherwise, because the quantity of metal which it contains is no longer consistent with its impression, and to pass it to another for legal weight would be a deception as to the quantity of merchandise, or, indeed, a sort of forgery, of a public document. In a word, the modern doctrine on the subject of money—a doctrine accepted not only in the writings of philosophers, but also in the codes of the great civilised States,—is in almost every way the very opposite of the ideas of the ancient regime.

However, the *Moniteur*, about a year since, contained an announcement which would seem to indicate that the government considered as still in force the laws and edicts of the ancient regime relative to money, and especially against the following operations :—

- 1st. *Picking*, or *selecting*, which some persons think to stigmatise under the affected name of *billonage* or *trébuchage* :
- 2nd. Melting ;
- 3rd. Buying and selling at a premium.

Proceedings were actually commenced, at the end of the year 1857, against some of the principal money-changers of Paris, who resorted, without concealment, to these practices.

It is true that the proceedings were almost instantly suspended ; doubtless, because the government, after a more careful inquiry, found that the statements inserted in the *Moniteur* were very doubtful. But the commission appointed in 1857 by the minister of finance, appears to have been inclined to give some validity to the revived pretensions of the ancient regime, of which the official journal had made itself the echo. It alluded to the point whether the old Draconic laws, which were in existence prior to 1789, were still in force, without solving the question, and it expressed itself in severe terms upon the whole of the operations referred to above ; and it has been seen in the preceding chapter that, with regard to some of them, it recommended the enactment of penalties if none already existed. With such tendencies, avowed and patronised by an important commission, a few more observations respecting these operations may not be superfluous.

Let us take successively the acts in question ; and first let us speak of *billonage* or *trébuchage*, which we will call by the modern and more simple and significant name of *picking* or *selecting* : we will speak of it without separating it from the remelting, which is the object for which the coins are generally selected.

The reader has seen, above, that the “picking” such as was begun to be practised in France on a large scale, about 1825 or 1830, had for its object to withdraw from the circulation, for profitable use, the pieces of 5 francs, which, owing to the imperfection of the ancient processes both for proportioning the quantity of silver, and for extracting the gold from the ingots of this metal, contained a value superior to 5 francs. We think we have shown that this special case of selecting, dating about thirty years ago, and of which we are now speaking, was not merely an operation licit in itself, but useful to society ; and that apart from these accidenta-

and temporary circumstances, and with money well made, that is, where the standard of weight and fineness fixed by law had been observed, the practice of "picking" would have been impossible; from whence it follows that, if the government wishes to prevent this practice, it has the power of doing so; it has only to take care to fulfil its duty, which is to see that the money is struck in conformity with the law.

Nevertheless, the advocates of the resurrection of the edicts of the ancient regime on the coinage, with the view of justifying the severities which they call for against "picking" and melting the coins, have represented that these operations are nothing less than the perpetration of a robbery, to the prejudice of the State; for, according to them, and one of the organs of this opinion has said as much in round terms, *money is in a certain sense public property*, from which they draw the logical consequence that a private individual can not touch it without committing a fault or a crime. Nay, more, these acts would constitute the crime of treason, inasmuch as they would be *a want of respect for the work of the State*. Such words have actually been employed.

How, and in what respect, can money be *public property*? I have exchanged my merchandise, say, for example, the *hectolitre* of corn, for another commodity, which shall be 100 *grammes* of silver of nine-tenths fineness, and these 100 *grammes* consist of four discs of 25 *grammes* each, commonly called 5-franc pieces. Why should the 100 *grammes* of silver be public property more than the *hectolitre* of corn? Is it because the public has need of discs making 100 *grammes* of metal? But it seems to me that the public has greater need of the corn. Is it because these discs have been by the care of the State made of a certain weight and fineness, and certified as such by the impressions stamped on the obverse and reverse?

But the very moderate cost of these operations has been paid to the directors of the mints who have performed them ; the private individual who brought the ingots, from which the discs were produced, to be coined, paid the coiner. Besides, the State has also certified the *hectolitre* of corn, since it has verified the measure through which the corn has passed. If the piece of money which I carry in my pocket is in a certain sense *public property*, or the property of the State, there is no form of riches, no species of property which is not in the same predicament ; for there is none which does not contribute to the national prosperity, to assure our existence or subsistence, and which has not more or less the guarantee of the State, were it only by the public force and the courts of law which check or prevent deception in the quantity and quality of merchandise. This would be especially true, in a certain sense, of landed property, which, in fact, by the taxation which it supports, may be considered up to a certain point as belonging to the State. Inasmuch as the land pays on an average (in France) the eighth of its revenue for income tax, it may be said to that extent to be the property of the State. If, then, it were finally admitted that money is in a certain sense public property, and that, in consequence, those who receive it in payment are prohibited from disposing of it as they please, the writers who at all times, and under all circumstances, are so fond of appealing to authority, would have no great difficulty in proving that the State is the co-proprietor of every real estate, and that the assent of the government is necessary before any landowner can alienate or even improve his property. This lands us in simple communism. Nor ought it to surprise us, if we commence with a programme in which are inscribed the inventions of the Regency, the reminiscences of the system of Law, and the ordinances of the worst days of Louis XIV., a prince who, if he exhibited a grandeur of

genius and character, was still an unmitigated despot, and one who showed less respect for the rights of property than any other sovereign who has occupied the throne of France.*

A piece of money in the hands of its owner is his private property as much as his field, his furniture, his food, or his clothing. The holder may cast it into the river; how much more reasonably, then, may he be entitled to select from the hundred 5 *franc* pieces, which he has in his cash-box, ten pieces to be melted, if such should be his interest or pleasure. It were to subvert all sound doctrines respecting property, to admit that the State retains any right whatever over money, excepting it be to require that it should constantly possess its prescribed weight and value; because, money being a measure, as well as a merchandise, it is the duty of the State to see that it remains in conformity with its type, the same as the *metre*, or the *gramme*, or the *litre*.

As to the imputation of a *want of respect for the work of the State*, with the best possible intention, I cannot understand it; but it seems to me that they who put forth this grievance would be better employed in considering the respect due to the rights of private property. Are they to be understood to mean that coins ought to be assimilated to public monuments, and that he who degrades them by throwing them into the crucible, deserves the same punishment as the person who should have mutilated a statue in a public place? But there is nothing in common between a piece of money, which is only a certified ingot, and a statue, which the public

* In one of the works which were published by the members of the Academy of Moral and Political Sciences, in 1848, during the commotion caused by the Revolution of the 24th February, M. Troplong brought out conspicuously the communistic character of the opinions of Louis XIV. on property, and the contrast which they present to the ideas which formed the basis of the Code Napoleon. On this subject the writings themselves of Louis XIV. may be consulted. Some very significant extracts will be found in M. Henry Martin's "History of France," Vol. XIII., p. 259, edition of 1858.

gratitude may have erected to a great man; the artistic portion is quite an accessory to the coin, and, moreover, the piece of money is private property, whilst the statue belongs to the community.

But, perhaps, in alleging that to melt the money is to show a want of respect for the work of the State, it is meant that as it bears the effigy of the prince, to destroy that effigy would be an outrage on the sovereign. This view would have the disadvantage of being borrowed from the official doctrines of the evil days of the Roman Empire, when the Emperor was the object of a hypocritical idolatry, and when the cases of high treason were multiplied indefinitely. But if it be a crime to destroy, by remelting a piece of money, the effigy or the armorial bearings of a prince, it will also be a crime to tear a stamp which shall represent the one or the other; and to be indictable at the assizes, it will suffice to have thrown into the fire an old sheet of stamped paper.

The pieces of money which pass through the hands of the State, are, during the time that they remain in the possession of the receivers, public property, or property of the State. The State has then clearly the right to make such use of them as the public authorities shall have deemed advisable; and thus, for example, after 1825, it might have subjected the 5 *franc* pieces, with which the public treasuries were gorged, to the operation of refining, and so have secured the profit which has fallen into the hands of the refiners. It may even be observed that the movement of the taxes brought naturally, and without effort, an immense number of pieces of 5 *francs* into the hands of the agents of the State, whereas the refiners were, and are, obliged to procure them at much expense, and even by the payment of premiums. In this point of view, the operation would have

been easier for the State than any one;* but even in the very narrow point of view as to the profits to be derived from the refining of the 5 *franc* pieces, to extract the small excess of silver, and the minute proportion of gold which, thirty years ago, were left in them, the right of the State does not exclude that of individuals. The one and the other occupy similar ground; they have the same point of departure and the same goal. They co-exist for the same reason, and, under this aspect as under every other, there is no ground for saying that the operation of "selecting" and remelting is a robbery perpetrated to the prejudice of the State.

But it is insisted that, if private individuals are free to *select* the coins, so as to separate the heaviest for remelting them, the light pieces only will be left, and the currency will be vitiated. To console those persons who feel this apprehension, it is only necessary to remark, that with money properly made, that is to say where the coins shall be in conformity, both as to weight and fineness, with the requirements of the law of the year 11, the speculation of "selecting" and remelting is no longer to be feared, since those who undertook it would assuredly be ruined. There is reason to believe that, at the present time, thanks to the perfection at which the mechanical and chemical arts have arrived, the limits of weight and fineness might be diminished—especially the former,—which would still further tend to render the operation impossible. Doubtless, when the coins have circulated for a long time, they lose a sensible fraction of their weight. The careful experiments of Messrs.

* The administration, however, refused to embark in the undertaking, when advantageous proposals were addressed to it, for taking the place of the private refiners, and refining the 5 franc pieces paid in for taxes. These proposals were made several years previously.

Dumas and De Colmont, prove that a 5 *franc* piece, which has passed from hand to hand for a century, will have lost a *gramme* and a half, making about 30 *centimes*; thus the private individual, who wished to export the silver coins after having remelted them, would avoid the old pieces, and would make a *selection* of those only which were new and almost perfect. In this way, it is true that, if the government has taken no precaution for withdrawing the coins which are worn with time, *selecting* and remelting will have the effect of leaving only those pieces which are of diminished weight in circulation. But does it follow that, to prevent this process of vitiating the currency, the best mode is to invent new penalties, or to revive the old edicts against “selecting” and remelting?

It is not necessary to resort to the argument that the power of “selecting” and remelting pieces of money is the natural and necessary corollary of the rights of property. Apart from this consideration, however decisive, it would be easy to cite a score of cases in which the operations of “selecting” and remelting are of palpable convenience, and of an evidently legitimate character. A jeweller wishes to make use of some of the silver money in circulation to meet the necessities of his business. It would be unreasonable to interdict him from taking in preference the heaviest coins; and, however much it might be forbidden, he could not be prevented from doing so. The merchant who wishes to discharge a debt abroad with silver specie, will in the same manner prefer the coins which are of full weight, because the foreigner is too shrewd to accept in any other way than by weight the pieces of money that are sent across the frontiers.

In truth, we are dwelling too long on these ideas, which public opinion has already condemned, and which have for ever disappeared from the codes of all civilised States. We

know what was the origin in former times of the interdicts levelled against the melting of money, and the "selecting" which usually preceded it. The spirit of cupidity and spoliation dictated that prohibition in times of ignorance, and it was afterwards perpetuated under the financial pressure to which unscrupulous governments have been constantly exposed.

Let us call to mind a remark which has been made, that to prohibit the "selecting" or remelting of coins, became a useless severity from the moment that the exportation of money was permitted. It was thenceforth only necessary to transport the specie across the frontier to be enabled to carry out the remaining process with impunity. There is, then, every kind of motive why the laudable idea of maintaining the integrity of the French coinage, and its conformity with the type determined by the law, should not be diverted into a question of proceeding with rigour against the operations of "selecting" and melting. It is otherwise that it must be realised, and it is in another direction that the problem must be solved. To carry on the government with a penal code, is consistent enough with barbarous nations, where the ruling power practices unmitigated despotism at all times, and, between two courses, prefers that which is the most convenient for its idleness and ignorance; but it is not becoming to those civilised States where the government professes to respect their citizens in their persons and property. With civilised nations, the penal code should reserve its severities for acts which the conscience condemns; but it must not be allowed to strike with the sole object of sparing the government the vigilance and care which are among the number of its imperative duties.

The case thus stated, where is the difficulty which we shall now encounter, and whence does it arise? With time,

an inequality may and must inevitably manifest itself between pieces of money of the same denomination. Some, which are old and worn with long circulation, will weigh less than the others which are new, and it is feared that if, in these circumstances, the practice of "selecting" be permitted, private individuals will make a profit out of the withdrawal of the latter, so that the former only will remain in circulation. Very well. It is well to foresee the fact, for history attests that it has frequently, if not always, occurred. But it is also proper to ask if the motive for which private individuals put aside coins of full weight, is not precisely the existence in juxtaposition of the pieces of light weight which the vicious or incomplete wording of the law, or its unwarrantable interpretation, would assimilate to coins of full value. The cause of the evil is this favour which, in contempt of principle, it is attempted to accord to coins of light weight. Let the government and the legislator, acting up to their mission, banish from the circulation these defective coins, or authorise them to pass in payments for only what they are worth, and from that moment no one will have any further interest in separating the pieces of full weight. In a word, the true solution, that which does violence to no one, that which troubles no citizen in his industry and liberty, is either to withdraw the light coins, or to declare by law that they shall be only taken in payments according to their weight.

It may not be useless here to remark, that in conformity with what has been done in other countries, where the law has declared that light coins should only be taken for their weight, it would be well, in case such a measure should be adopted in France, to admit that, in small payments up to a certain sum, the pieces should pass for their full nominal value. The English law of 1774 upon the silver currency fixed this limit at £25 sterling (about 630 *francs*). We

might, by analogy in France, fix the limit at 500 to 600 *francs*. It seems, however, that it would be better to name a still lower sum, 100 *francs*, for example.

As a general proposition, the withdrawal of the light coins would be easy. We know that in the United Kingdom, the Bank of England takes charge gratuitously of this service, and supports the expense. She weighs all the money which the movement of trade brings to her counter. For this purpose, she has a machine which effects the object very skilfully. Similar machines might be used in France, at the Bank as well as in its branches, and in the offices of the principal Receivers General. They would thus intercept every piece which should be below the standard weight. If a machine of this kind were kept at every mint, for the verification of the coins which issue from the balance, the necessity for the establishments which we have just enumerated would be notably simplified. The expedient which consists in deciding legislatively that coins should only be received by weight in payments beyond a certain sum is quite practical, and has for authority many precedents. This would, perhaps, be in itself sufficient. However, for permanent exactness in the monetary system, which is important in the rapidity of transactions, it would be well to combine this act with the withdrawal of the light coins, by establishing weighing machines in the public establishments through which the money flows.

Experience, in all nations, has shown the impossibility of maintaining in parallel circulation, under the same denomination, coins of full weight and fineness, and pieces of inferior value, because it is contrary to the very nature of things to which we must all conform ourselves. The light pieces have always and everywhere expelled those of full weight and fineness, and to keep the latter in circulation it has been always necessary to throw the others into the crucible of the Mint,

or to give them a circulation according to their value. On this point, the annals of England may be consulted with peculiar interest.

In France, at the present time, the withdrawal of the light coins, which have accumulated since the year 11, would only be a serious operation as regards the 5 *franc* pieces, and we may form an approximate estimate of what it would cost so far as they are concerned. The *wear* has not yet had time to be very considerable; the French and foreign refiners have withdrawn from the circulation, from the motives already explained, the chief part of the coins anterior to 1825, and even to 1830. The oldest pieces have, therefore, been hardly a quarter of a century in circulation; the corresponding loss would not be more than eight centimes per piece. Upon the sum of a *milliard* (£40,000,000), which would have the average circulation of about fifteen years, the loss would be 48,000 *kilogrammes*, or 9,600,000 francs (£384,000). There would also be the expense of melting and recoinage, which according to the tariff of the Mint, would, supposing it to be general, amount to 7,500,000 *francs* (£300,000). We thus reach a total expense of 17,100,000 francs (£684,000). If the mass of 5 *franc* pieces remaining in France at this time, amount, as some persons suppose, to 1,500,000,000 *francs* (£60,000,000), the expense would amount to 25,650,000 *francs* (£1,026,000), always with the supposition, evidently forced, that the recoinage would be general. The sum is large assuredly, but the advantage of having thenceforth a sound currency is well worth it. These charges would be spread over two operations, or three at the utmost, because in cases of this kind success depends on rapidity of movement. It must be added that the sum of 25,650,000 francs is the maximum, which for several reasons would never be reached. It is likely that for an undertaking so vast, the State would come

to an agreement with the directors of the Mint for a reduction of the tariff. In the next place, the coins of a date anterior to 1825 and 1830, which are still in circulation, would yield a profit rather than a loss. And, besides, some of the pieces would be found above the legal weight and fineness, and consequently would not require to be returned to the crucible.

Under William III., a century and a half since, parliament voted eagerly £1,200,000 sterling to re-establish on a sound basis, that is in conformity with its type, the silver money which had been worn by circulation or excessively "sweated." Weight for weight, £1,200,000 would make 30,000,000 francs of our money; but taking into account the greater value of silver at that time, it would be equal to 70 or 75 millions of francs of our day.

A word or two upon the purchase and sale of coins at a premium. Latterly, some persons have made violent efforts to incriminate those who are engaged in these operations. The vehemence with which they are attacked is hardly explicable, inasmuch as they follow a commercial pursuit, that of the money-changer, perfectly well understood, and duly licensed. In every age and in all countries this commerce has existed, because it is useful and necessary, and because it is not condemned by any of the principles on which society is founded. Ignorant governments have often tried to subject it to unjust restrictions, opposed to the public interest, but they have always failed in their efforts. In France, previous to 1850, every one who went on a journey bought gold at the changers at a premium of about 10 or 20 centimes per piece of 20 francs; neither justice nor the government frowned on these operations; everybody admitted that they were quite practical and legitimate, both on the part of the changer who sold, and the traveller who bought. At present, the premium has passed from the

gold to the silver; by what sorcery is it that what was formerly innocent should now become criminal?

A fact, however, has occurred, the announcement of which has cooled the ardour with which certain persons have set about demanding the application of the edicts of the ancient regime against the purchase and sale of coins at a premium, and also against the trade in ingots, as often as they were at a premium in relation to the tariff of the Mint. It has been observed that the Bank of France, which is treated with merited consideration by the State, gave itself up to this commerce on a grand scale at the very moment when it was denounced with so much hubbub, as a crime against the rights of the State. The monthly returns in the *Moniteur*, upon the subject of the Bank of France, contained a prominent announcement during the latter part of 1855, and the whole of the years 1856 and 1857, in the following words : *Premiums paid for the purchase of gold and silver bullion.* These transactions were mostly in ingots, but they also included coined specie, which even for the Bank were preferable, inasmuch as the Bank purchased ingots only to send them to the Mint. Besides, there is no way of distinguishing them : the trade in ingots and that in coins are inseparably connected ; they are so practically, as well as in the ideas of those retrograde writers who have astonished the public with their passionate appeals for the intervention of the government. The old edicts were equally merciless towards the one and the other of these operations. The edict of the 24th October, 1711, the application of which has been demanded recently in France, contains, in the very article which prohibits the melting of money by private individuals, an interdict against the purchase of gold or silver bullion at a higher rate than the tariff of the mints, and the penalty consisted of confiscation, with the addition of "*an arbitrary fine*" (I quote the words of the text)

“*which shall not be less than the value of the specie confiscated.*” At this rate, the Bank ought to be condemned to pay, for confiscation and fine, a fabulous sum, something like two *milliards* (£80,000,000), if not more; for it probably purchased more than a *milliard* in the course of the three years 1855, 1856, and 1857. In virtue of the salutary principle of equality before the law, it would have been impossible to have summoned before a magistrate the money-changers, without placing beside them at the bar the governor and directors of our great financial institution.

On the subject of the exportation of specie, of the penalties with which it was formerly visited, and of the idea which has been recently put forth, of either reviving them in full vigour, or with some mitigation, or of substituting for them a custom-house duty, I will add nothing to that which has already been said previously (Section V., Chap. V.), and again, more specially, in the preceding chapter.

CHAPTER VIII.

OF A DIFFERENT SOLUTION WHICH HAS BEEN RECOMMENDED,
AND WHICH WOULD CONSIST IN THE ADOPTION OF A GOLD
STANDARD.

IN the midst of the difficulties with which our monetary system is now surrounded, some persons have proposed a solution which would consist in withdrawing from silver the quality of the standard, and attaching it to gold. It would be understood that the *franc*, deprived thenceforth of all connection with our metrical system, would be composed of about 29 *centigrammes* of fine gold, or of 32 *centigrammes* and a fraction of gold of the fineness of nine-tenths. As

regards silver, the only choice is between the two following courses : either to reduce it to the condition of a token as in England, or to lessen the proportion of metal contained in the piece hitherto called a franc ; it might contain 4 *grammes* of fine silver instead of $4\frac{1}{2}$ *grammes*, with the power of afterwards making another diminution if the divergence between gold and silver increased. These two combinations resemble each other very much, they spring from the same source, and are tainted with the same vice. In both cases, the *franc* would cease to be what the law has established : $4\frac{1}{2}$ *grammes* of fine silver. But the attempt may as well be given up, for do what we will, it can be called nothing but coining false money. When *Philippe le Bel* diminished the quantity of silver contained in the crowns of his time, he never did anything more serious or more characteristic. In vain will it be said that the law, in giving the name of a piece of 20 *francs* to a certain weight of gold, has assimilated 29 *centigrammes* of gold to the *franc* ; to this argument there is a peremptory answer : the law has not said that the franc was 29 *centigrammes* of gold ; it has said, very expressly, that the *franc* was $4\frac{1}{2}$ *grammes* of silver, and when it assimilated 29 *centigrammes* of gold to $4\frac{1}{2}$ *grammes* of silver, it was in a temporary manner, and this provisional arrangement should cease from the moment that 29 *centigrammes* of gold ceased to be effectively the equivalent of $4\frac{1}{2}$ *grammes* of silver. However well disposed we may be, it is impossible that the *franc* can continue to be 29 *centigrammes* of gold, after there has been a serious divergence between this weight of gold and $4\frac{1}{2}$ *grammes* of silver ; unless we altogether obliterate the *general disposition* which is at the head of the law of the year 11, and also give a direct denial both to the affirmations relative to what is called a *fixed point* in the preamble, and to these words of Gaudin, that *the kilogramme of silver shall always be worth 200 francs, and shall never be worth more or*

less, and to those of the same minister indicating the obligation we should be under to remelt the gold coins when the relative value of the two metals should be changed; not to mention those of Crétet upon the fixedness of the nominal value of silver, those of Prieur, upon the same subject; and twenty passages from the documents which served as a preparation for the law of the year 11, and which are all explicitly in the same sense.

But, it is said, did not the legislator of the year 11 exceed his powers? What right could he have to chain us to a silver standard, and to decide that the *franc* should forever be of the weight of 5 *grammes* of silver, of nine-tenths fineness, or, which comes to the same thing, of $4\frac{1}{2}$ *grammes* of fine silver? Here there is a distinction to be drawn: if it be meant that at the time when the two metals presented the same fixedness of value, and when there was no reason to believe in the approaching depreciation of the one more than the other, it would have been perfectly legitimate and correct, in the point of view of strict probity, to change the standard, and to invest with that dignity gold instead of silver, then nothing could be advanced more consistent with truth. Only that it would have been very like changing for the sake of change, for it is by no means proved, in the judgment of those who have reflected on these matters, that in a general sense, and taking all the circumstances and qualifications into account, gold may not have better claims than silver to be invested with the functions of the monetary standard. I know more than one good judge who is of an opposite opinion. It would have been possible, in thus changing the monetary unit from silver to gold, to preserve the relation established between this unity and the metrical system: to this end it would have sufficed to have adopted for the monetary unit the *gramme* of gold, of nine-tenths fineness, or 5 *grammes*, or even 10 *grammes*. On these

terms, and under these conditions, the change in the standard might have been justified ; it would have been effected in the spirit which animated the legislator of the year 11, continuing the most honourable and judicious traditions of the French Revolution. It would not have contravened the engagements in the preamble of the law of the year 11, which invokes the execution of transactions and the preservation of property. But it would be another thing to alter the standard, and transfer that attribute to gold, at the very moment when it is impaired in value and launched in a movement of depreciation. It were vain to dissimulate, under such circumstances, that the real motive for the change consists precisely in that depreciation in near perspective, by which the State would benefit illegitimately at the expense of its creditors, and which deserves to be severely characterised.

Doubtless, the legislator of the year 11 has bound us, but wherefore ? What is the servitude which he has imposed on us ; what more than that which all honest people accept, of paying exactly their debts, and of fulfilling faithfully their promises ? Yes, thus far, the legislator of the year 11 controlled our liberty ; but in so doing he did not exceed his powers. If he did dispose of us, it was by the same right as that by virtue of which he defined all the conservative laws of property. He also disposed of us, and restricted our liberty when he enacted that the State should pay at certain intervals, and without deduction, the interest of the public debt, when he laid down the principle that the State should not deprive the humblest citizen of his field, otherwise than paying him its full value, and until after the expropriation should have been proved by solemn forms to be necessary for the public interest ; he disposed of us and fettered our liberties when he inscribed in the code the means of coercing the debtor who, being indebted 100 *francs*, should pretend to acquit himself by the payment of 50 or 75. Who has

ever discovered that when these bonds were forged by the legislator he exceeded his powers? Such a servitude as this, instead of being repudiated by a free people, is the very yoke which they are proud of bearing. Let us mistrust the liberty which would consist in releasing us from the engagement by virtue of which the *franc*, under present circumstances, ought not to be anything but 5 *grammes* of nine-tenths fineness, or else the quantity of gold which is freely exchanged in the market for that quantity of silver. In this pretended liberty there is nothing to be seen but false money, and State bankruptcy.

England may be regarded as having effected in 1816 the delicate operation of the alteration of the standard. She then substituted the standard of gold, frankly avowed, for the standard of silver which had been expressly chosen in ancient times, but of which the titles had become somewhat obscured in people's minds without, however, being quite forgotten. At that time, the men who exercised the greatest influence on the government and on public opinion allowed themselves to be unduly influenced by the advantage which gold possesses of being more portable than silver. They thought also that gold fulfilled better, or at least less imperfectly than silver, the important condition of fixedness of value. In that, they probably deceived themselves, and if at the present time the most competent judges in such matters in England were consulted, a great number would pronounce themselves in an opposite sense. But it is essential to add that in 1816 there was nothing which warranted the expectation that the relation of gold and silver would be modified. It was still less probable that, if a change did occur, it would consist in a fall in the value of gold. The fact is that the relation between the two metals underwent in the succeeding years a very slight modification, which was maintained until 1848 or 1849, but it was in the direction of a rise of gold relatively to silver, and not of its depreciation.

It may be here remarked that, at the time in question, England was in a position to make a free choice on the subject of a monetary system, inasmuch as, for about twenty years previously, she had been under the regime of paper money, owing to the suspension of payments in specie by the Bank, which dated from the month of February, 1797.

It is still more important to observe, if history is, as I believe it to be, warranted in saying that in 1816, England altered the monetary standard and substituted gold for silver, which previous to the period of paper money performed this part, it should also add that the British legislator of 1816 by no means thought that he was performing an act of so wide a bearing, but that on the contrary he believed himself to be remaining faithful to ancient traditions. In fact, throughout this affair, parliament followed almost blindly the ideas and opinions which Lord Liverpool had developed in his *Treatise on the Coins of the Realm*, written in 1805, a work which is a sort of public document, for it appeared in the form of a letter to the king. This statesman, in opposition to other authorities, older and, if I may be allowed to say so, more versed than he in such matters, maintained in his treatise the opinion that silver had for a long time ceased to be the monetary standard in England, and that, consequently, the British legislature was perfectly free to choose between gold and silver.

Whatever may be the case in England, the idea of altering the standard in France, in these later times, finds determined partisans. I regret to have to cite among the writers who have espoused this view, M. E. Levasseur, one of the young men whose career has been marked with great distinction. The sagacity of which he has already given such repeated proofs, in the collection and verification of facts, would not allow M. Levasseur to deceive himself on the real character of the legislation of the year 11. He does not

deny that the intention of the legislature at that time was to have one sole standard, and to confer that attribute upon silver. He regrets that in 1848 and 1849, at the origin of the working of the mines of California, a more decided stand was not taken against gold. But in the state to which matters have now arrived, he considers that the simplest and best course is to bow to the authority of what he believes to be accomplished facts, and to consider gold as having taken by main force the place of silver, a place which it must of necessity be left to occupy, without troubling ourselves to inquire whether it has been usurped or not.* In a word, he would here apply the doctrines of the fatalist school, which is so easily resigned to accept that which morality would urge us to reject, under the pretext that destiny has pronounced its judgment. Nevertheless, it does not seem to me that we are yet reduced to quite so much philosophy; it seems to be still possible to keep each in its proper place, to the great honour of principles, and to the great satisfaction of a multitude of respectable interests. There is much silver money still remaining in France, sufficient to compose, with bank notes, and with gold itself, which it is not intended to proscribe, an instrument of exchange quite efficacious, and very firmly established, in conformity with the idea which animated the legislation of the year 11.

There are plenty of selfish interests, plenty of minds which from levity, presumption, or unscrupulousness, are in constant coalition against the right, which is a sufficient motive why those who are guided by reason and the public interest should defend sound principles when they are in danger. One of the titles by which science recommends itself most, is that it keeps constantly unfurled the banner of principle, which it never deserts; and it must not be

* The views of M. Levasseur are given in a very interesting volume, entitled, *Question de l'Or*; Book IV., Chap. IX.

found sanctioning those infractions and violations of principle to which politicians, for their convenience or repose, or the success of their combinations, are always inclined.

The argument which appears to have seduced M. Levasseur, is that the entire effect to be apprehended from the new mines is already produced, the dreaded perturbation already consummated ; to use his own words, if we were to take the necessary steps for maintaining the silver standard, " we should not avert a revolution already effected, but only make a counter-revolution." M. Levasseur has here fallen into a grave error : we are very far from the time when the full effects of the new gold mines will have been accomplished. It is even remarkable that up to this time the fall in gold, as compared with silver, has been hardly perceptible. In this, the predictions which would have been thought the most justifiable have for the moment failed, and this theory seems to have suffered a defeat ; but the circumstances of the case have admitted of explanation.

M. Levasseur's mode of arguing has, if I mistake not, a great defect ; it tends, in fact, assuredly against his own intentions, to sanction a practice deserving of condemnation. It would furnish a specious pretext for the successive degradation of the coinage in the following manner : whenever, by the inattention or negligence of the government, the coins in circulation should not have been gradually renewed by recoinage, so as to furnish a circulating medium which had always the full legal weight, it would be possible, by applying the reasoning of M. Levasseur, to pretend that it is warrantable to proceed to a new coinage of lighter pieces, that is to say, by the reproduction not of the primitive type, but only of the mean weight of the pieces in actual circulation. It is not thus that, in the country where the monetary system has preserved the strictest relations with the principles of honesty, statesmen and philosophers have reasoned, men

to whose influence is due the testimony of respect for the rights of property and the security of transactions : it is not thus that reasoned, under William III., the illustrious Chancellor of the Exchequer, Montague, and the eminent thinker Locke, in whose footsteps the parliament felt bound in honour to march.

It must be plainly said that the proposal to adopt the gold standard at the present time in France, is opposed to the best established views upon the essence of money. An English writer, whom I have already had occasion to cite, Mr. J. Maclaren, has in a very recent publication maintained, with reason, that gold has to some extent forfeited its claim to the quality of a standard. "The institution of a measure of value, by which the distribution of the property of the society can be regulated, is, confessedly, a necessity in a civilised community ; men must have such a measure by which to arrange their transactions. Again, every one would allow that the chief point to be attended to, in the choice of this measure, should be invariability ; and it would seem to follow, as a matter of course, that when the commodity chosen for this purpose had lost a portion of the quality which originally fitted it for its office, another commodity, if any one could be found, possessing the requisite qualities in a superior degree, should be at once substituted for it, before any change in the distribution of the property of the society had taken place ; and this seems so plain that it is almost a waste of time to state it."* From hence Mr. Maclaren concludes that it is now the duty of parliament to return from a gold to a silver standard. I do not undertake to say that parliament will yield to the suggestions of Mr. Maclaren, though he has furnished very good arguments in their favour ; but, assuredly, his reasoning condemns, *in toto*, the

* "A Sketch of the History of the Currency," comprising a brief review of the opinions of the most eminent writers on this subject, page 358.

proposition which would at this juncture tend to induce France to adopt a gold in lieu of a silver standard.

In the commission appointed in France in 1857, this proposition had nevertheless an advocate, and it was in the person of one not the least considerable of its members. But the system of this eminent functionary is unsound from its very foundation. In fact, according to him, the law of the year 11, instead of resolving in favour of silver the question of a single standard, would admit the system of a double standard. The sole response to be made to such an assertion is by appealing from the author to himself better informed. It is only necessary to beg him to read attentively the law of the year 11, and if the wording and arrangement of the law leave him in any doubt, to cast an eye upon the *exposé des motifs*.

To the preceding considerations, and which appear to me of more than sufficient weight to incline the balance in favour of an immediate intervention of the legislature, with a view of guaranteeing our monetary system from the dangers which menace it (the system as defined and understood by the law of the year 11), other reasons might be added, especially those which appear of a minor order to certain minds who believe themselves more practical and shrewd than their neighbours, because they exclude from their politics all honourable regard for great thoughts and great principles. At the present time there may be observed among the civilised nations a certain movement in favour of the adoption of a uniform system of weights and measures, which would inevitably be the metrical system of France. Several States in both hemispheres have officially given in their adhesion to it; and the idea is gaining ground, noiselessly and slowly it is true, among the great nations of the world, in England, Germany, and the United States. It will, perhaps, be remembered that at the conclusion of the

Universal Exposition of 1855 all the commissioners, and all the juries then present in Paris signed a declaration which called the attention of government to the utility and great convenience of a general convention for this object, and an international association was formed for the purpose.* Such innovations as these, if they do not resolve themselves into a profit measurable in shillings and pence, are yet not without their price. It seems also that France, which took the initiative in the metrical system, and which called on all the nations to concur in its adoption, as it was afterwards in the free exercise of her reason and for the common interest adopted by herself, should be the last country from whom should be expected any acts calculated to weaken or thwart the tendency to imitate her example. If so, it is not superfluous to add that in abandoning the silver standard, and substituting one of gold, according to the process recommended,—which would consist in enacting that henceforth the monetary unit should be the twentieth part of the actual pieces of gold of 20 *francs*,—we should make a breach in the metrical system, we should destroy the prestige which it enjoys among the civilised nations, so as to render impossible its universal adoption, which might otherwise be very probable. In fact, the *franc*, such as it is at this time, forms an integral part of the metrical system. Until the

* The most remarkable manifestation which resulted from this fact has emanated from the English committee, which formed part of the International Association. In a series of publications, this committee, after having maturely considered the subject, has declared that a decimal system of weights and measures, of which the units shall be allied to each other by decimal relations, is for the interest of the public, and that the best basis to give to the whole system is the *metre*, such as was determined by the International Commission under the French Republic. I wish to draw the attention of enlightened men to the last of these publications, entitled, *What is the best Unit of Length?* It is from the pen of Mr. James Yates, one of the vice-presidents of the International Association, and one of the men who in the two hemispheres have devoted most labour to the task of spreading the fruitful idea of a uniform system of weights and measures for the whole civilised world.

year 11, inclusive, the legislature of France of 1789 attached the greatest importance to its remaining so, and its intention has, down to our day, been religiously respected. Now, would not the *franc* be banished from the metrical system, if it were henceforth understood that the monetary unit is the twentieth part of the quantity of the precious metal contained in the pieces of gold of 20 *francs* ?*

CHAPTER IX.

APPRECIATION OF THE SYSTEM WHICH CONSISTS IN ADJOURNING INDEFINITELY THE LEGISLATIVE SOLUTION.

I WILL conclude with a reflection. There are two ways of infringing the prescriptions of the legislator of the year 11, and of drawing upon French society the violations of right, as well as the sufferings and the perturbations of all kinds, of which we have fully sketched the perspective in the course of this work ; it may also be said there are two ways of subjecting the State to those injurious accusations which it would not be easy to refute. The first, more frank or more audacious, would be to lay to-morrow before the legislative body a bill providing that henceforth silver is deprived of the attribute assigned to it by the legislation of the year 11 (in that respect a faithful interpreter of all the national assemblies which had succeeded since 1789), and that, for the future, gold shall be the standard metal under the conditions which I have just narrated. The other, more timid, would be to remain with our arms crossed, and to leave things to follow indefinitely the course which they have taken for themselves. From that time, our silver money

* Instead of weighing exactly 5 *grammes*, the *franc* would have a weight represented by an indefinite fractional number (0 gramme 32258, &c.)

would continue to flow out of the country until the last 5 *franc* piece had left France. To retain even the smaller pieces it would be necessary to reduce them to the condition of tokens, by withdrawing a part of the fine metal which they contain. The demonetisation of silver would then be an accomplished fact. At whatever point of view I place myself, whether I regard it as a question of interest, of equity, or of honour, I cannot perceive a great difference between the one and the other of these two processes. The effects would be the same, they would be equally disastrous, equally condemnable. On some future day, History, when its pen shall be held by judges firmly devoted to the cause of principle, such as was Tacitus for his time, will visit the one or the other of these projects with its severest condemnation. In many respects omission is almost as culpable as action. This is especially true in relation to that particular social force, the destination of which is to show itself in action, and that force is called the government.

The abatement which has taken place since the commencement of 1858, in the exportation of silver from the French territory, is a fortunate circumstance, inasmuch as it renders more practicable the conservation of the monetary regime prescribed by the law of the year 11; so far we have reason to congratulate ourselves. This must not, however, be made an excuse for inactivity, or for an indefinite temporisation. The current which drew the silver from within our frontiers has not ceased to exist, and nothing indicates that it is likely to cease. On the contrary, it is probable that it will recommence with great vivacity. Let the event then only be taken for what it really is, a respite given to the authorities of France to enable them to act. It would be, perhaps, better to say that it is a pause on the part of the sole authority to which governments own themselves amenable, Divine Providence, to enable every one to do his duty.

